

County of Loudoun
Department of Planning
MEMORANDUM

DATE: March 4, 2010
TO: Loudoun County Planning Commission
FROM: Judi Birkitt, Project Manager
SUBJECT: **March 10, 2010 Planning Commission Work Session**
Kincora Village Center, ZMAP 2008-0021 – Transportation Issues

AGENDA:

Outstanding Transportation Issues

- 1. Pacific Boulevard Alignment and Potential Impacts to the Broad Run Toll House and Bridge Ruins** (Heidi Siebentritt, Historic Preservation Planner)
- 2. Phasing** (George Phillips, Senior Transportation Planner)
- 3. Regional Road Contributions**
- 4. Other Transportation Issues**

BACKGROUND:

The Planning Commission held a public hearing on the above-mentioned application on October 15, 2009. Ten members of the public spoke regarding the application. Seven spoke in favor citing the benefits of the two regional road extensions and the environmental preservation. Mr. Pahlavani expressed concern regarding Pacific Boulevard impacting his residence. The Loudoun County Preservation Coalition expressed support for preserving the Broad Run Toll House. The Piedmont Environmental Council spoke against the application, stating that it is premature until the Board completes the Keynote Employment Comprehensive Plan Amendment (CPAM), and that the proposed Community Development Authority (CDA) could harm the County's credit rating.

Planning Commission discussion, specifically related to transportation, included the proposed Community Development Authority, phasing, and the impact of the Pacific Boulevard alignment upon residents. The Commission voted 8-0-1 (Brodrick—absent) to forward the application to work session for further discussion.

In a work session on January 14, 2010, Ben Mays, Chief Financial Officer, and Jack Roberts, County Attorney, provided the Commission an overview of the Route 28

Highway Improvement Tax District Community Development Authorities (CDAs). At a subsequent worksession on February 4th, the Commission focused upon land use issues. Discussion included phasing, whether the mix of uses should include residential uses, the amount and scale of commercial retail and service uses, the number of hotels, and unmet housing needs. The Commission requested comparisons between Kincora and other mixed use projects, an overview of the Kincora special exception and the integration of the two applications, an update on residential in vertical mixed use buildings within the Route 28 Tax District, possible solutions for the lack of amenities for the residents, sample unmet housing needs proffer language, and clarification on open space and residential density. The Commission also asked staff to explore the potential for increased height and additional office floor area within the development and to verify school capacity numbers. Regarding the 2-year expiration of the public use site and the 15-year expiration for the performing arts center, the Commission asked if the applicant would be agreeable to paying the value of the capital facilities at that time.

Staff is currently researching the Commission's land use questions and will provide responses at a future work session. Other issues that staff anticipates the Planning Commission will want to discuss at a future work session include design, capital facilities, and proffers. The focus of this work session is outstanding transportation issues as discussed below.

TRANSPORTATION ISSUES

This application has three major transportation issues related to the alignment of Pacific Boulevard, phasing, and regional road contributions.

1. Pacific Boulevard Alignment

The Revised Countywide Transportation Plan calls for Pacific Boulevard to be extended northward to connect to Russell Branch Parkway, providing a key regional connection. The issue is that two single-family residences and the historic Broad Run Toll House and bridge ruins are located within the path of the potential alignments for the roadway. Any alignment also requires constructing a bridge over the Broad Run, which will trigger State and Federal review of the Pacific Boulevard alignment when the applicant applies for a federal permit with the Army Corps of Engineers.

Further, any alignment that impacts the Broad Run Toll House and Bridge would be subject to approval by the State (DHR, DCR, DEQ) prior to beginning work, as well as the County's Historic District Review Committee (HDRC). The Broad Run Toll House and Bridge have national and local significance. They are the only such combination existing in Virginia and as such, this resource was one of the first Loudoun County properties to be listed in the National Register of Historic Places in 1970. The Toll House and Bridge were then designated by the County as a local Historic Site District in 1972. Though the stone, arched double spanned bridge has been lost to flooding, the original stone house appears to retain its historic and

structural integrity and continues, after nearly 200 years, to mark the location of one of the first toll gates erected along the Leesburg Turnpike.

The applicant proposes that the Planning Commission and Board of Supervisors take action on the application without determining the final alignment of Pacific Boulevard. As proposed, the alignment would be determined in the future and separate from this land use application when either VDOT prepares right-of-way plans or the applicant submits construction plans and profiles to the County for administrative review. The Concept Plan shows an approximately 450-foot wide envelope, across the northeast corner of the site within which Pacific Boulevard could be aligned. The proffers also allow for the alignment to be shifted outside of the envelope without a zoning concept plan amendment or proffer amendment. Refer to Proffer III.B.

The following agencies have provided recommendations on the Pacific Boulevard Alignment:

VDOT - Any Pacific Boulevard alignment would be subject to VDOT approval. VDOT has provided three referrals advising the applicant to avoid the Toll House and Bridge Ruins and to provide an alignment west of the historic resource. Refer to Attachment 4c.

VDHR - Any alteration of the Broad Run Toll House and Bridge Ruins, including relocation or demolition, would require review and approval by the Virginia Department of Historic Resources (VDHR) prior to commencement of any work. VDHR has provided a referral recommending that the toll house and bridge ruins be preserved in place. See Attachment 4e.

HDRC - Any alteration of the Broad Run Toll House also requires review and approval by the County's Historic District Review Committee (HDRC). Through the referral process, the HDRC recommends that the toll house and bridge ruins be preserved in place. See Attachment 4d.

Staff Recommendation

Staff concurs with VDOT, VDHR, and the HDRC and strongly supports a Pacific Boulevard alignment that preserves the Broad Run Toll House and bridge ruins in place.

Due to the federal and state review process that will follow the County review process and that will be triggered by the proposed crossing of the Broad Run, staff agrees that it may not be reasonable in this particular case for the applicant to commit to a specific Pacific Boulevard alignment at this stage. However, staff recommends that the proposed Pacific Boulevard envelope exclude the alignment that would prevent preserving the toll house and bridge ruins in place. Staff recognizes that delaying the decision will allow the applicant to continue pursuing

the matter with the two residents who would be impacted by the Pacific Boulevard alignment.

2. Phasing

The transportation phasing issue is that with or without a Community Development Authority (CDA) to finance road improvements, the connection of Gloucester Parkway from Route 28 to Loudoun County Parkway and the connection of Pacific Boulevard north to Russell Branch Parkway need to occur earlier than proffered, in order to mitigate the impacts of the development upon the surrounding road network and to avoid worsening already failing intersections in the vicinity. Refer to OTS referral, Attachment 4A.

A CDA is proposed in the applicant's proffers as a means of financing road improvements. As discussed at the January 14, 2010 work session, a CDA is a tool to provide long term financing for infrastructure and improvements on a specific property. CDAs are private initiatives but they do require Board approval; normally a decision made outside a rezoning. A CDA is not a direct debt to the County but it would impact the County's overlapping debt ratio, which could prevent capital improvements. Further, should the CDA fail, rating agencies would expect the County, as a AAA jurisdiction, to find a remedy. CDAs are recommended to fund "transformational" improvements and should not be created routinely or for non-essential services. See Attachment 2 for additional information on CDAs provided by Ben Mays, Chief Financial Officer.

In the event that a CDA is created for this development, the applicant has proffered to construct the connection of Gloucester Parkway from Route 28 to Loudoun County Parkway and the connection of Pacific Boulevard north to Russell Branch Parkway within 3 years of the date the CDA is created. Without a CDA, the applicant proposes to link the phasing of road improvements to non-residential and residential thresholds as follows:

Table 1. Applicant's Proposed Transportation Phasing

PHASE	PROFFERED TRANSPORTATION IMPROVEMENTS	TIMING	
		Nonresidential	Residential
Phase 1A	<ul style="list-style-type: none"> Construct 2 lanes of Pacific Blvd from Gloucester Parkway to an on-site point necessary to serve the use 	Prior to first record plat or site plan approval for any use on the Property	
Phase 1B	<ul style="list-style-type: none"> Construct 4-lane section of Pacific Blvd with trail from southern property boundary to site Road 2. Install traffic signal at Gloucester/Pacific intersection warranted. 	Prior to 300,001 s.f. which may include up to 270 hotel rooms.	Prior to 301 st residential unit
Phase 2A	<ul style="list-style-type: none"> Construct 4-lane section of Pacific Blvd to site Road 1. 	Prior to 1,100,001 s.f. or 271 st hotel	Prior to 701 st

	<ul style="list-style-type: none"> Construct 10-foot trail along corresponding section of Pacific Blvd. Install traffic signal at Gloucester/Pacific intersection and site entrances if warranted. 		residential unit
Phase 2B	<ul style="list-style-type: none"> Construct 4-lane Pacific Blvd with trail and bridge to Russell Branch Parkway. Install traffic signal at Gloucester/Pacific intersection and site entrance if warranted. 	Prior to 1,700,001 s.f. or 501 st hotel room	Prior to 1,069 th residential unit
Phase 3	<ul style="list-style-type: none"> Construct 4-lane Gloucester Pkwy with trail and bridge from Pacific Blvd to Loudoun County Parkway including bridge Construct 10-foot trail along Gloucester Pkwy Install traffic signal at Gloucester Pkwy and Pacific Blvd and site entrances 	Prior to 2,400,001 s.f.	

Source: Applicant's Proffer Statement

Staff Recommendation

Staff recommends that, with or without a CDA, the Gloucester Parkway connection between Loudoun County Parkway and Pacific Boulevard be constructed prior to beginning Phase 1 and the Pacific Boulevard connection to Russell Branch Parkway be constructed prior to beginning Phase 2. Staff's complete recommendations are outlined in Table 2.

Table 2. Staff Recommended Phasing and Improvements

Staff Recommended Phasing	Staff Recommended Improvement
Prior to commencing Phase 1	<ul style="list-style-type: none"> Construct a 4-lane divided (U4M) segment of Gloucester Pkwy between Pacific Blvd and Loudoun County Pkwy Construct a 4-lane undivided (U4) segment of Smith Switch Rd between Hastings Drive and Gloucester Pkwy, including a grade-separated crossing of the W & OD Trail Construct a 4-lane divided (U4M) segment of Pacific Blvd from Gloucester Pkwy/Nokes Blvd to the northernmost entrance for the Phase 1 development on the site Construct an additional left turn lane on northbound Pacific Blvd to westbound Waxpool Rd
Prior to commencing Phase 2	<ul style="list-style-type: none"> Construct a 4-lane divided (U4M) connection of Pacific Blvd to Russell Branch Pkwy Construct an additional left-turn lane from eastbound Waxpool Rd to northbound Pacific Blvd Construct a free-flow right-turn lane from eastbound Waxpool Rd to southbound Pacific Blvd

Prior to commencing Phase 3	Alternatives: A. Wait for the following improvements to be in place by others: <ul style="list-style-type: none"> • Waxpool Rd/Loudoun County Pkwy interchange in place and open to traffic • A 6-lane divided (U6M) section of Farmwell Rd/Waxpool Rd in place and open to traffic between Ashburn Rd and Loudoun County Pkwy OR B. Complete the following: <ul style="list-style-type: none"> • Widen Gloucester Pkwy to a 6-lane divided (U6M) section between Pacific Blvd and Loudoun County Pkwy. • Provide a fair-share cash contribution (15%) towards the Waxpool Rd/Loudoun County Pkwy interchange.
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Source: OTS Referral 3

3. Regional Road Contributions

At issue is that the applicant proposes to construct only the two regional road connections—Gloucester Parkway from Route 28 to Loudoun County Parkway and Pacific Boulevard north to Russell Branch Parkway—and does not address the failing off-site intersections and road widening projects recommended in the traffic study.

For example, the Applicant's traffic study indicates that by 2025, in order to accommodate existing and future site, local, and regional traffic, Route 7 and Route 28 would need to be widened to 8 lanes with grade-separated interchanges. The current and draft CTP call for Route 7 to remain 6 lanes with grade-separated interchanges and Route 28 to be an 8-lane limited access freeway. The County would anticipate a contribution to the widening of Route 7 and Route 28 to 8 lanes with grade-separated interchanges. None is proposed.

The traffic study also indicates that Waxpool Road and Loudoun County Parkway would require major lane improvements and that the Waxpool Road/Loudoun County Parkway intersection would need to be converted into a grade separated interchange. Twenty-five percent of the development's traffic would traverse through this intersection. The recommended interchange is not included in the Countywide Transportation Plan. The County would anticipate contributions toward both the interchange study and the conversion of the Waxpool Road/Loudoun County Parkway intersection into a grade separated interchange. None are proposed.

The applicant's position is that the additional or surplus capacity that will be generated by constructing the two critical links (Gloucester Parkway and Pacific Boulevard) will be far greater than the volume that the project will add to the regional roads such as Route 7, Route 28, and Waxpool Road.

Staff recognizes and appreciates the applicant's commitment to providing these two key road improvements including two bridge crossings over the Broad Run. However, staff finds that additional contributions and improvements are necessary to

mitigate the transportation impacts associated with the development. Refer to Table 2 for staff's recommended phased improvements.

4. Other Transportation Issues

Since the Planning Commission public hearing and in response to staff's third referral comments, staff and the applicant have been working towards resolving the following additional transportation issues:

- a. Trails – The applicant has clarified that trails will be located within the right-of-way and maintained by VDOT where possible. In such cases where it will not be possible to locate the entirety of the trail within the right-of-way, due to utility and landscaping installations, the Owners Association (OA) will maintain any trail and sidewalk portions located outside of the right-of-way. The applicant has also agreed to specify that trails will connect to existing trails or will be constructed with a terminus allowing others to connect where existing trails do not exist at the connection points for Pacific Boulevard and Gloucester Parkway. Staff finds this acceptable. **Status: Resolved pending review of revised proffer language.**
- b. Traffic Signalization – The applicant has agreed to (a) increase the proffered cash equivalent for signals at “4 by 4” intersections (four lanes for each approach) to \$300,000 in keeping with current cost estimates and (b) provide signals if warranted by VDOT or Loudoun County, and (c) that the proposed signal estimates are subject to County approval. **Status: Resolved pending review of revised proffer language.**
- c. Shuttle – Staff suggests that the applicant commit to 20 minute headways for the proffered shuttle. See OTS referral, Attachment 4a. **Status: Unresolved.**

STAFF RECOMMENDATION: Staff cannot support the application. As currently proposed, transportation impacts are not mitigated and phasing does not provide for the needed transportation connections early enough in the project to mitigate the impacts of the traffic generated by the use.

SUGGESTED MOTIONS:

1. I move that the Planning Commission forward ZMAP 2008-0021, Kincora Village Center to a subsequent Work Session for further discussion.
- OR,
2. I move that the Planning Commission forward ZMAP 2008-0021, Kincora Village Center to the Board of Supervisors with a recommendation of denial based on the following Findings for Denial:

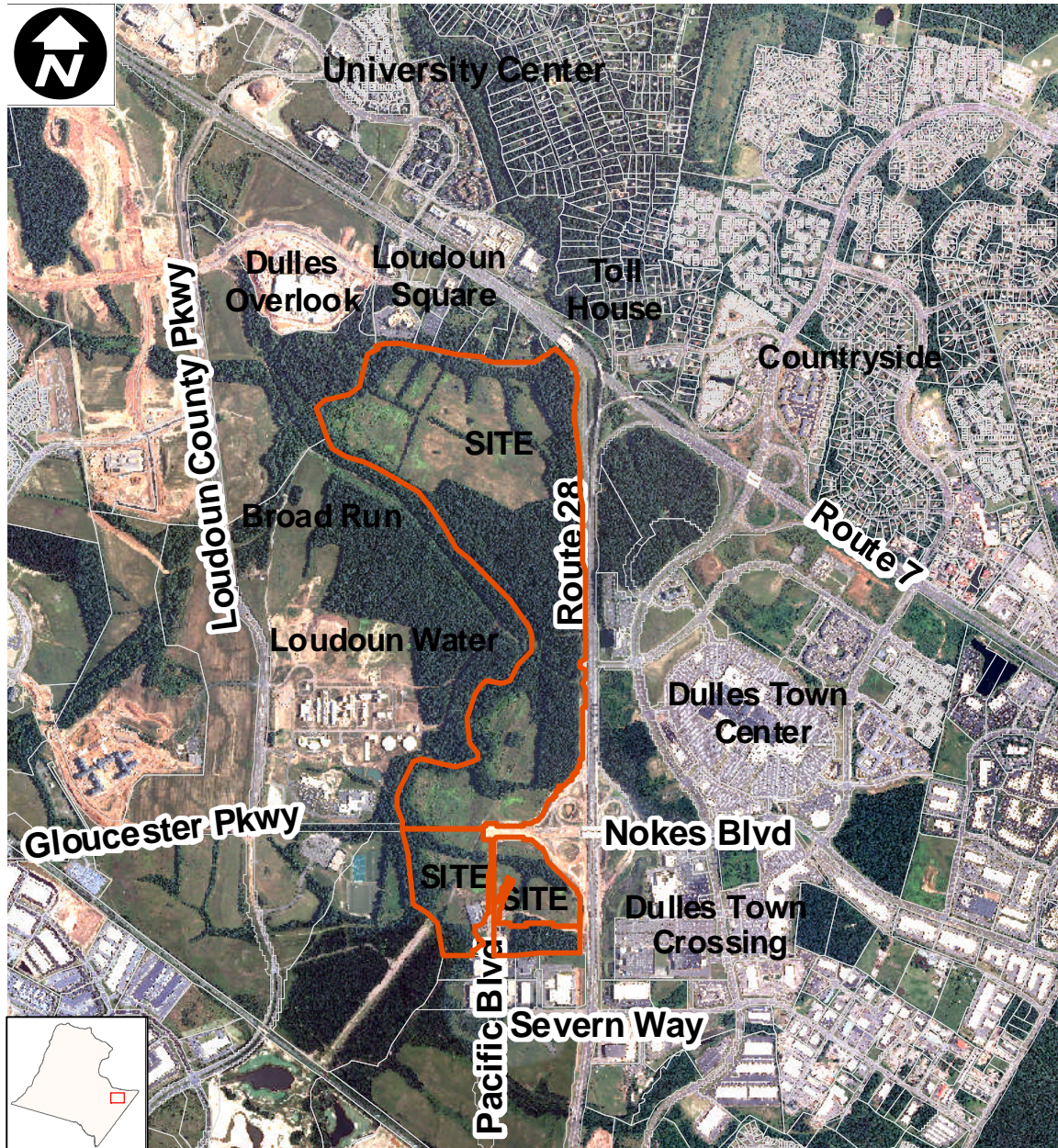
OR,

3. I move that the Planning Commission forward ZMAP 2008-0021, Kincora Village Center to the Board of Supervisors with a recommendation of approval, subject to the Proffer Statement dated January 10, 2010 and based on the following Findings for Approval:

ATTACHMENTS:

1. Vicinity Map
2. Staff Conclusions
3. CDA's: A Primer
4. Referrals
 - a. Office of Transportation Services (January 21, 2010, September 4, 2009, April 27, 2009)
 - b. Community Information and Outreach (December 14, 2009, August 25, 2009, April 17, 2009)
 - c. Virginia Department of Transportation (VDOT) (November 12, 2009, August 28, 2009, March 11, 2009)
 - d. Historic District Review Committee (September 30, 2009)
 - e. Virginia Department of Historic Resources (October 6, 2009)
5. Applicant's Proffer Statement (January 13, 2010) (currently under review)
6. Applicant's Concept Development Plan, Sheet 11 and 13 (October 2008, as revised through January 10, 2010)

VICINITY MAP



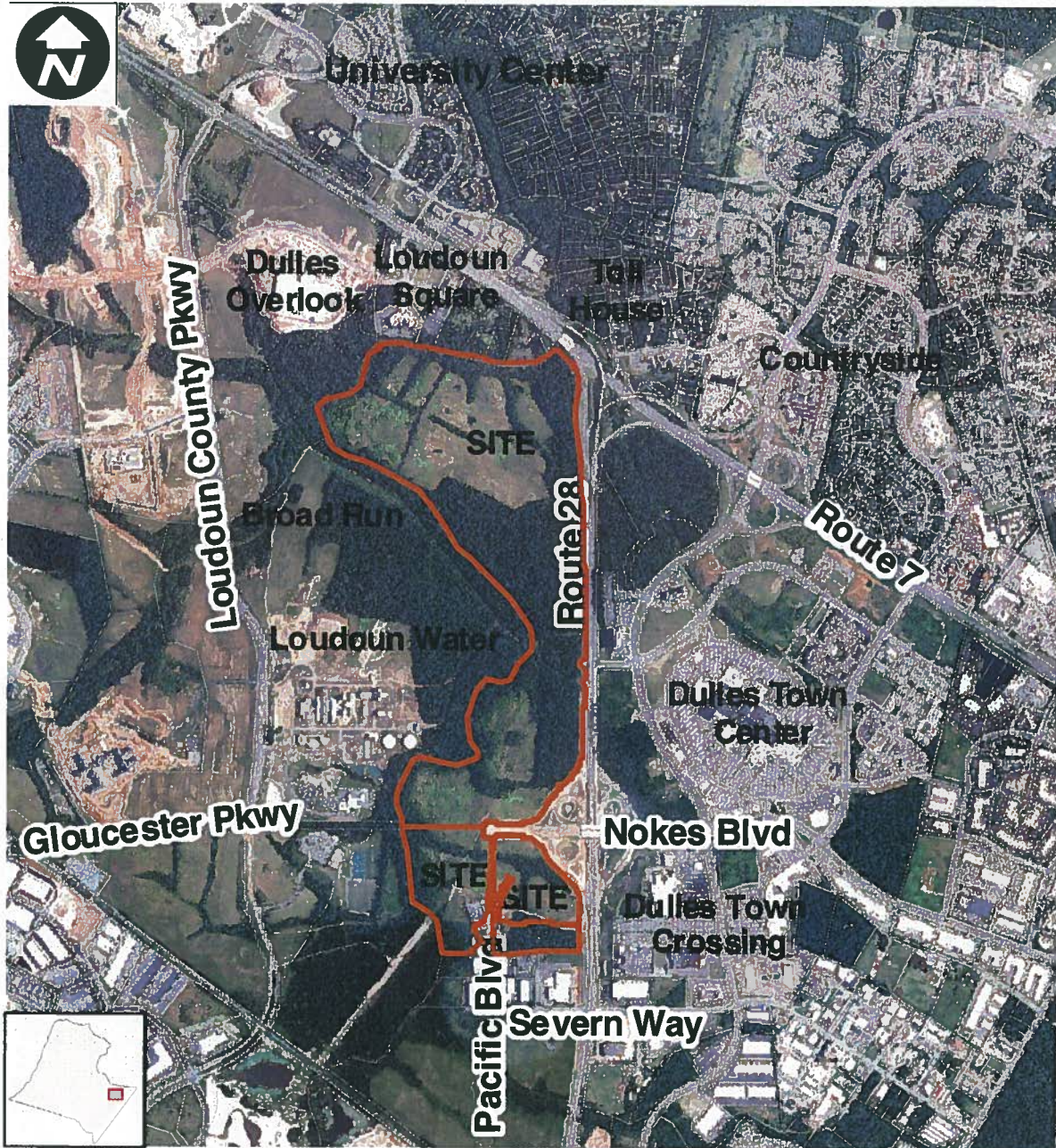
Directions: From Leesburg, take Route 7 east to Route 28 south. Turn right (west) onto Severn Way, then right (north) onto Pacific Boulevard to view the southern portion of the property.

Attachment 1

CONCLUSIONS (TRANSPORTATION)

1. The proposal does not provide additional off-site improvements necessary to allow the development to move forward per applicable policies contained in the 2001 Revised CTP and to mitigate the development's impacts on an already overburdened road network.
2. With or without a Community Development Authority, transportation improvements will not occur early enough in the project to mitigate transportation impacts. The connections of Pacific Boulevard to Russell Branch Parkway need to be in place earlier than proposed, and the connection of Gloucester Parkway from Loudoun County Parkway to Route 28 needs to be in place prior to commencing Phase 1.
3. Off-site transportation improvements, regional transportation, and transit impacts are not mitigated.
4. The proposed alignment of Pacific Boulevard could result in the demolition or relocation of the Broad Run Toll House and bridge ruins, a County-administered Historic Site District and listing in the National Register of Historic Places.
5. The proffered connections of Pacific Boulevard to Russell Branch Parkway and Gloucester Parkway from Loudoun County Parkway to Route 28 provide critical links to the regional road network that would relieve existing failing intersections in the vicinity, including Route 7 and Route 28.
6. The two proffered stream crossings of the Broad Run at the Gloucester Parkway and Russell Branch Parkway bridges are vital to the system of interconnected trails that PRCS is developing along the County's Stream Valley Corridors.
7. The proffered multi-purpose trails, sidewalks, and natural trails are consistent with the Bicycle and Pedestrian Mobility Master Plan. However, pedestrian access has not been provided within Land Bay N, and pedestrian access has not been provided from parking areas to all uses.

VICINITY MAP



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CDA's: A Primer

ATTACHMENT 3

CDA's: A Primer

Definition¹

A private entity authorized by the Board of Supervisors (upon petition by a majority of property owners, or those owning a majority of the assessed value, within the proposed CDA boundaries) for the purpose of providing, operating, and/or maintaining public infrastructure "as necessary to meet the increased demands placed upon the locality as a result of development within the district."

Such activities are financed through the issuance of tax-exempt bonds or other types of debt. These bonds are often referred to as "dirt bonds" because they are backed by the value of the vacant land within the district's boundaries. Repayment is financed through the following mechanisms, either singly or in combination.

- An additional tax assessment is levied upon the owners of land within the boundaries of the CDA district.
 - annual *ad valorem* assessments up to 25 cents per \$100 of taxable market value unless all property owners agree to a higher rate
 - a special one-time assessment
- The local government agrees to pay over a portion or all of the tax revenues generated within the CDA district. This is known as Tax Increment Financing (TIF). Possible tax sources include all or portions of the following:
 - real estate taxes
 - BPOL
 - personal property taxes
 - the local portion of sales tax revenue
 - TOT funds
 - a meals tax
 - any other tax which the local government is authorized to levy

[VA Code 15.2-5158(A)(1). Also, *Community Development Authorities*, Informational Work Session with the Prince William County Board of Supervisors, 15 February 2005, p. 1; *CDAs: The Good, the Bad, and the Opportunity*, Presentation by Ken Powell to the VGFOA Fall Conference 31 October 2008, pp. 3-4.]

¹ CDA's go by different names in different jurisdictions, such as Metropolitan Districts in Colorado, Community Development Districts in Florida, and Infrastructure Development Districts in Georgia.

Legal Authority

Established under VA Code Section 15.2, Chapter 51. [See Reference Material 1].

Powers

[From VA Code 15.2-5114 and VA Code 15.2-5158]

CDA's may:

- Exist as a corporation for 50 years;
- Adopt, amend, and repeal bylaws, rules, and regulations for the conduct of its affairs, maintain an office, hire staff, and adopt an official seal;
- Sue and be sued;
- Enter into contracts;
- Borrow money;
- Issue revenue bonds (the issuance of any bonds does not require the locality's consent unless the consent is specifically required by the ordinance or resolution establishing the CDA);
- Request that the County levy and collect a special tax on real property within the district
- Finance, fund, plan, establish, acquire, construct, enlarge, extend, equip, operate, and maintain the infrastructure improvements listed in the ordinance or resolution establishing the district.

Authorized Infrastructure

[From VA Code 15.2-5158]

Authorized improvements are those listed in the ordinance or resolution establishing the district *"as necessary to meet the increased demands placed upon the locality as a result of development within the district."*

The statute lists examples, but asserts that the list is not all-inclusive, using the phrase *"including, but not limited to:"*

- Transportation: Roads, bridges, parking facilities, curbs, gutters, sidewalks, traffic signals, street lights.
- Utilities: Storm water management and retention systems; gas and electric lines; water mains and sewer lines (VA Code 15.2-5114).
- Recreation: Parks and "facilities for indoor and outdoor recreational cultural, and educational uses," including entrance areas, security, fencing, and landscaping.
- Public Safety: Fire prevention and control systems, fire stations, fire plugs, water mains, fire trucks, rescue vehicles, and other equipment.
- Education: School buildings and related structures;
- Senior Housing: Infrastructure and recreational facilities for age-restricted active adult communities with a minimum approved population greater than 1,000.

Pros & Cons

In addition to the reference materials specified within the text below, this section derives from more general material found in Section 2. This includes excerpts from two presentations:

- *Community Development Authorities*, Informational Work Session with the Prince William County Board of Supervisors, February 15, 2005;
- Ken Powell, *CDAs: The Good, the Bad, and the Opportunity*, Presentation to the VGFOA Fall Conference, October 31, 2008.

It also contains the following articles and news stories:

- Janice C. Griffith, *Special Tax Districts to Finance Residential Infrastructure*, The Urban Lawyer;
- David Hitchcock, *Special District Pros and Cons*, American City & County, March 1992;
- Rich McKay, *DeLand, Fla., Community Fears Shadow of New Subdivision*, The Orlando Sentinel, December 17, 2000.

Pros

Supporters claim the following advantages.

1. Incentivizes the development or redevelopment of a particular geographic area as construction of the infrastructure is not dependent upon the government's ability to raise the necessary tax revenue.
2. Accelerates project timing.
3. Increases assessment values of undeveloped land as undeveloped land with infrastructure is more valuable than undeveloped land without infrastructure.
4. Improves the quality of a development as the entity constructing the infrastructure is also the entity that will market the project.
5. Relieves existing taxpayers from subsidizing the costs of new development by encouraging the private sector to finance infrastructure that would normally be paid for by tax revenue as,
 - tax-exempt bonds lower the cost of capital available to private landowners and developers, and
 - repayment stream minimizes the developers' financial exposure for the underlying infrastructure necessary to develop the land by placing the burden of repayment on future owners;
6. Lowers the purchase price of housing in the district because the upfront infrastructure costs are amortized over a longer period and the savings to the developer will be passed onto home buyer.

Cons

Opponents raise the following concerns.

- 1. Incentivizes sprawl as it is financing infrastructure where no infrastructure currently exists, might not exist for decades, and possibly might never have existed.**

The last is demonstrated by the use of CDA financing to underwrite construction of a 30-mile road that would allow access to and enable development of approximately 48,000 acres of desert northwest of Phoenix.

- 2. Provides an unfair competitive advantage to those developers who receive a CDA.**

For example, the establishment of a CDA by the Henrico County Board of Supervisors to fund the infrastructure for a high-end shopping mall resulted in a lawsuit by another mall developer with a competing project in the County. The CDA responded with a lawsuit naming all County taxpayers as defendants, followed by a citizen-initiated lawsuit against the County. [See Section 3 for additional details]

As an alternative to a lawsuit, every other developer in the County may petition the Board to establish a CDA to finance their developments multiplying the number of entities within the County authorized to issue bonds. This was a concern recently raised during a debate over a proposed CDA by the Board of Supervisors in Isle of Wight, VA. [See Section 4 for additional details]

This is a valid concern. According to a 1991 analysis of a proposed private sanitary district in the Route 606 area, Loudoun County's financial advisors at the time warned that with the diminution of the County Board's control over the timing and values of debt issues, "the balkanization of debt issuance authority will be viewed as a negative factor by the rating agencies."² [See Section 9 for the complete report]

- 3. Once approved, there are few controls and limited oversight of the CDA, except those specifically provided for in the resolution or ordinance establishing the CDA.**

This can lead to an overextension of debt obligations beyond the CDA's ability to repay, accusations of political corruption, Ponzi schemes, outright fraud, or the churning of funds to produce fees for financial advisors. JP Morgan and a subsidiary of AIG found themselves under investigation by the IRS for the last. Such investigations can result in the loss of the bonds' tax-exempt status and the creation of a substantial tax liability to the CDA as issuer of the bonds. [Section 5 contains

² Thomas McLoughlin and Ben Mays, "Final Report to the Board of Supervisors on the Proposed Establishment of a Dulles Perimeter Sanitary District," Government Finance Research Center, September 17, 1991.

additional information on the IRS investigation as well as examples of the other issues listed]

4. **Where the CDA maintains and/or operates the infrastructure, the long-term costs and fees to the landowners will far exceed the original proposals which typically only calculate the revenue stream necessary for repayment of the construction bonds.**
5. **Homeowners in the district may balk at paying an additional tax, placing pressure on elected officials to lower or eliminate the special tax and return the costs of the development to the entire locality.**

In Frederick County, MD County Commissioners reported receiving “numerous complaints from homeowners in the Urbana CDA from homeowners who say they didn’t realize they would have to pay the CDA tax on top of their property taxes, fire taxes, and homeowner association fees.”³ The County requires disclosure of the tax; however, Commissioner John Lovell, Jr. stated, “The day of signing (house closing documents), the euphoria is such they’ll sign anything even if it says they’ll give up one of their kidneys.”⁴ [See Section 6 for more details]

A similar situation occurred with far greater publicity in Montgomery County, MD. In 2003, the Montgomery County Council established a special tax district for the Clarksburg Town Center development. Councilman Michael Knapp, who represented the area containing the development, voted in favor of the district’s establishment, stating, “It ties the funding for the infrastructure for the community to that community.”⁵ Four years later, under pressure from the new constituents living in the development, Councilman Knapp initiated an effort to abolish all special tax districts in the County. His reasons: Such districts “place an unfair tax burden on residents. It [the special tax district] didn’t work the way people thought it would.”⁶ [See Section 7 for additional details]

6. **Homeowners in the district may balk at paying municipal taxes for services or facilities outside the district.**

This has occurred with at least one CDA in Colorado, where the Castle Pines North Metropolitan District chose to incorporate as a city in part to avoid paying both County and District taxes. [See Section 8 for additional details]

³ James Rada, “Lake Lingamore, Md., Property Owners May Finally See Development,” *Frederick News-Post*, October 12, 2005.

⁴ *Ibid.*

⁵ Robyn Lamb, “Proposed Montgomery County Community Gets Boost from County Council,” *Baltimore Daily Record*, April 4, 2003.

⁶ Sonia Boin, “Official Seeks to Get Rid of Tax Districts,” *Frederick News-Post*, October 27, 2007.

CDA's: A Primer

Alternatively, they may choose to vote as a bloc against the issuance of bonds for facilities outside of the district's boundaries or become a powerful voice against any increases to the general property tax.

7. **Limits a local government's ability to finance public projects as debt incurred by the CDA is calculated as underlying debt of the local government.** [See reference material in Section 9]

In the 1991 proposed private sanitary district analysis Loudoun County's financial advisors at the time stated, "The aggregate amount of debt for these types of districts will be included on the County's own debt statement as obligations...At some point, the aggregate debt load among more than a single district will begin to impinge on the ability of the County as a whole to sell its own debt. In other words, there may not be an immediate impact on the bond rating but there will surely be a negative impact in the future."⁷

The County's current financial advisors, Davenport & Co., have reiterated the first sentence, and implicitly the second, on more than one occasion.

8. **Successful marketing of the bonds often requires commitments from the local government.**

The interest rates on CDA bonds and the willingness of investors to purchase such bonds is a function of the perception of how likely the debt service on the bonds will be paid when due. As payment on the bonds can only be assured with successful completion of the project, the bonds present the investor with considerable risk. Prospective investors might then be limited to "persons or institutions familiar with the developers' track records and capable of assessing the potential for economic growth in the area served."⁸ One means of mitigating this risk and expanding the bonds' market is for the local jurisdiction to back the bonds with a moral obligation to assume the debt service in the event of default. Once granted, this may result in either a direct or an indirect requirement for the government to apply public funds to a project.

In 2002 the City of Richmond provided a moral obligation to pay up to \$3 million in debt service on bonds issued by the Broad Street CDA should its revenue stream fall short of projections. In May 2009, this promise required the City to appropriate \$655,000 in public funds to assist the CDA with its June 1st bond payment with the expectation that further revenue shortfalls will require additional appropriations. [See Section 10 for additional details]

Given this experience, it is not surprising that discussions over the use of CDA financing for a minor-league baseball stadium within a mixed-use development have

⁷ McLoughlin and Mays, September 17, 1991.

⁸ Janice C. Griffith, "Special Tax Districts to Finance Residential Infrastructure," The Urban Lawyer, Fall 2007.

dragged on for four years. In an analysis of the most recent proposal, the City's financial advisors, Davenport & Co., conclude the project "to be highly feasible with city credit support and highly unlikely to be financed otherwise."⁹ Further, a decision to provide such support through a guarantee of moral obligation would use nearly 11% of the city's debt capacity. Analysis by the *Richmond Times-Dispatch* further suggested that the revenue projections provided by the developer would fall short of the actual revenue needed. [See Section 11 for additional details]

Closer to home, the Route 28 Transportation Improvement District informed the Loudoun County Board of Supervisors that without a promise of its moral obligation, it would be unable to sell their bonds at an affordable interest rate for the financing of the 10 interchanges. The BOS agreed on an 8-1 vote with Supervisor Jim Burton casting the sole dissenting vote. In the initial years, the assessments were insufficient to generate enough revenue to pay the district's share of the annual debt payment. State transportation funds had to be used to make up the shortfall. While later assessments exceeded those projections, there is no guarantee that the County will not be called upon in the future to provide further public assistance should a downturn in the commercial market occur. [See Section 12 for reference material]

An alternative approach to risk mitigation is to request all necessary land use approvals upfront. In a presentation at the National Federation of Municipal Analysts 1997 conference, a speaker commented, "These deals need permitting and entitlements. They're essential in getting a deal done. But they have to be there before the bonds are issued."¹⁰ [See Section 13 for the full presentation]

9. CDA bonds are particularly vulnerable to default.

As noted above, repayment of a CDA's bonds is dependent upon the successful development of the property. However, the real estate and construction industry are extremely cyclical and often volatile. Oftentimes, the revenue and cost calculations prepared prior to the authority's establishment do not account for the possibility of economic downturns or the business' inherent cyclicity.

"The developer is betting the debt burden can be passed on to home buyers or commercial tenants."¹¹ If the project fails to reach completion, falls behind schedule, lacks viability for whatever reason, or if the underlying assumptions of the financial analysis were simply too rosy, the CDA will be unable to make its scheduled payments. This occurred in California and Colorado in the early 1990's. For example, in December 1990, *The Bond Buyer*, an industry journal, reported 41 defaults on bonds issued by special tax districts in Colorado.¹² Similarly, 29 California CDA's defaulted on their bonds between 1990 and April of 1997,

⁹ Will Jones, "Ballpark Plan Needs City Help," *Richmond Times-Dispatch*, May 19, 2009.

¹⁰ Jim Phillips, "California Land-Secured Financings: The Dirt on Dirt Bonds," Presentation to the National Federation of Municipal Analysts 1997 Conference in *Municipal Finance Journal*, Winter 1998.

¹¹ David Hitchcock, *Special District Pros and Cons*, *American City & County*, March 1992.

¹² As referenced in a footnote by Janice C. Griffith.

CDA's: A Primer

according to a presentation at the National Federation of Municipal Analysts 1997 Conference. [See Section 12 for the full presentation].

It is also occurring today in Florida, California, and even Virginia. In the first five months of 2008, 30 municipal bond issues defaulted. More than half occurred in Florida and California, the epicenters of the real-estate bubble. Of the 10 Florida bonds that defaulted in this period, all were sold by community development districts (the term used in Florida) within the last four years. By the end of 2008, there were 14 additional bond defaults in Florida. Again, all were sold by CDD's. An associate professor of Urban and Regional Planning at Florida State University told *The Tampa Bay Business Journal*, "When growth doesn't happen, CDD's are unsustainable."¹³ [See Section 14 for reference materials]

Approximately 20 CDA's in Virginia have issued bonds since 1998. As noted earlier, the City of Richmond paid out \$655,000 this spring to prevent the Broad Street CDA from defaulting on its June 1st payment. Last year, two other CDA's in Virginia collapsed. The first, in Isle of Wight County, had a residential component but had not yet floated bonds. Amid growing financial concerns and an increasingly troubled real estate market, the developer chose simply to cancel the project even though it meant swallowing \$4 million in planning expenses. [See Section 15 for additional details]

The developer of the second, in Williamsburg, was forced into bankruptcy by a corporate creditor, amidst charges of theft and fraud. Five months earlier, the associated CDA had floated over \$32 million in bonds. Concurrently, the developer stopped paying bills to contractors working on the project and debt service on other loans associated with the project, including \$16.3 million borrowed to purchase the land, a \$65 million preconstruction loan, and \$170 million in mezzanine financing. The York County Finance Director sits on the CDA Board. She claimed that the \$17.5 million of the bond funds already released had been subject to rigorous oversight. However, she and the Board of Supervisors were anxious to see a successful sale of the project by the lenders to a new developer who could finish the project and pay off the millions owed to contractors and bondholders. This month, the County reported that the property owners within the district had failed to pay either the 2009 real estate taxes or the special assessment. [See Section 15 for additional details]

Where default occurs, a few landowners become legally liable for bond payments which assumed a diffusion of the debt among a far greater number. In 1990, the Colorado Centre CDA announced that homeowners would face tax increases of \$3 to \$10 per \$100 of assessed value (approximately \$10-\$15,000 on an \$85,000 home) to service the debt on dirt bonds issued by the CDA between 1985 and 1986. While the financial projections, assuming endless growth in the demand for houses in Colorado Springs, called for the sale of 1,500 homes, only 150 had actually sold. When the

¹³ Tim Chapin as quoted by Janet Leiser, "Hole in 'Dirt Bonds' to Deepen as Losses, Defaults Mount," *Tampa Bay Business Journal*, December 10, 2008.

Rev. Michael Greenwalt, a resident of one such district, heard about the increase, he admitted to a reporter, "I was not very pastoral."¹⁴

The homeowners sued. They filed for bankruptcy. They refused to pay. They received threatening nighttime telephone calls: "You will pay back those bonds. You owe me. You're going to lose your home."¹⁵ They considered walking away, abandoning their homes to foreclosure. [See Section 16 for additional details]

A similar story occurred with the Castle Pines North Metropolitan District in Douglas County, Colorado. In this case financial projections required the sale of 600 homes per year to generate the necessary property taxes for debt service on the \$38 million in bonds issued by the district in 1986. However, in 1990, when the district defaulted on its bonds and declared bankruptcy, it had sold less than 500 total units. Court documents estimated that the cost to each homeowner to meet the district's obligations to bond holders would be \$63,000 for houses valued between \$140,000 and \$220,000. It took almost four years and \$2 million in legal fees to reach a bitter settlement, leaving the chair of the creditor's committee to comment, "It's the homeowners that are stuck with the developer's problems...It becomes who is the victim here? The developers are not the ones who are hurt, or have been hurt, or will be hurt. It's a problem of how the development in the state is structured."¹⁶ [See Section 17 for additional details]

Common wisdom is that dirt bonds are sold only to sophisticated, institutional investors. This is not true. In the case of the Colorado defaults, articles abounded about teachers and retirees and other individuals who trusted the promises of brokers than municipal bonds never fail. Earlier this year, investors filed class action suit against several Oppenheimer Municipal Bond Funds, which they claim over-invested in dirt bonds in violation of the funds' stated investment objectives. [See Section 18 for additional details]

In its 1991 analysis of the proposed Dulles Perimeter Sanitary District, Loudoun County's financial advisors offered the following warning:

"[I]f the district is established and the bonds do default, the County Board will find itself in a most difficult position. Individual homeowners within the district will undoubtedly petition the Board of Supervisors for relief from the excessive tax rates being levied on their homes. Will the County Board turn them away because there is no moral obligation pledge, or will some accommodation be sought to protect the residents who have purchased homes within the district and who are obligated to pay exorbitant tax rates? If the County shows the slightest intention of assisting the

¹⁴ "Many Tax-Free Bonds Are Going into Default in CO Land Bust - Weak Regulation and Greed Are Blamed as Investors, Home Buyers Lose Out - Worse than Silverado," *Wall Street Journal*, December 7, 1990

¹⁵ Mike Anton, "Property Owners, Bond Buyers Living in a House of Cards / Foundation of Districts Crumbling," *Colorado Springs Gazette-Telegraph*, January 27, 1991.

¹⁶ Keith DuBay, "Players Do 'Workout' on Colorado's Castle Pines North Deal," *The Bond Buyer*, March 31, 1994.

distressed homeowners within the district, its ability to distance itself from the bankruptcy is diminished.”¹⁷

Bond rating agencies will expect the local government to step in even without the formal guarantee of a moral obligation. According to the County's financial advisors, past and present, such expectation exist even where the State has enacted laws maintaining that CDA debt is neither the debt of the State nor the debt of the local government.

Conclusions

Much of the literature on CDA's and their bonds focuses on failure rather than success. This is because the failures are so spectacular. Certainly, there are successful examples; they simply do not make it into newspapers. The Dulles Town Center CDA is one example. As most of these bonds are unrated, no agency tracks them. Rule 15(c)(2)-12 of the Securities and Exchange Commission does not require continuing disclosure for the bonds. Thus, there may only be limited public information available with regards to the financial solvency of many CDA's. The assumption, then, is that they are doing fine – until they fail to make a payment.


Based upon the experiences of CDA's in California and Colorado in the 1990's, a few critical success factors can be suggested:

- A well-capitalized builder/developer with lots of experience and many successful projects behind them;
- A builder/developer who is willing to put a little skin in the game by adding cash to the proposed financial structure or posting a Letter of Credit;
- A strong, central location;
- Realistic financial forecasts, including a worst case scenario, that do not rely on future property development to generate the revenues necessary to retire the bonds;
- A tax rate that is reasonable throughout the life of the bonds;
- A tight, well-written authorization agreement;
- Local government authorization of debt in excess of the original agreement;
- Significant, continuous oversight by local government officials.

¹⁷ McLoughlin and Mays, September 17, 1991..

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County of Loudoun
Office of Transportation Services
MEMORANDUM

DATE: January 21, 2010
TO: Judi Birkitt, Project Manager, Planning Department
FROM: George Phillips, Senior Transportation Planner 
SUBJECT: ZMAP 2008-0021, Kincora Village Center
Third Referral

Background

In response to second referral OTS comments dated September 4, 2009, the Applicant has provided revised materials and responses for review. This review is based on materials received from the Department of Planning on October 20, 2009 including (1) response comments dated October 5, 2009 from Gorove/Slade (2) draft revised proffers dated October 5, 2009 and (3) a revised concept plan dated October, 2009 and stamped October 2, 2009 by Eric Siegel, engineer, with Urban Engineering. OTS also reviewed additional materials from Gorove/Slade regarding distribution of site traffic, dated November 18, 2009.

Transportation Comments

Discussed below are previous OTS comments from the first and/or second referrals, the applicant's response(s) (June 10, 2009 and/or October 5, 2009) and the current issue status in terms of whether the issue has been adequately addressed.

1. **Initial Staff Comment (First Referral April 27, 2009):** The applicant has provided a traffic study in support of the rezoning application that seems to combine trip generation resulting from both the rezoning land uses as well as the special exception uses. OTS notes that approval of the special exception, a separate application is not guaranteed and therefore the trip generation presented thus represents a worst-case scenario. Has OTS interpreted this assumption correctly? Also, there appears to be a discrepancy between this study and the special exception only traffic study with respect to the magnitude of proposed uses (office park) for the special exception. Please clarify.

Applicant's Response (June 10, 2009): *The trip generation presented in the study*

does present a worst- case scenario. A meeting was held with Loudoun County and VDOT staff on April 9, 2009 to address the comments and questions raised by OTS staff regarding the special exception application. The revised impact study dated April 27, 2009 shows a separate analysis for the Rezoning application and for the Special Exception application. Although the proposed Rezoning application incorporates the Special Exception uses, in order to differentiate between the two applications, the analysis for the two applications has been conducted separately.

Issue Status (Second Referral September 4, 2009): The study accurately reflects the approved uses, including the office park, for the Special Exception. The Rezoning application does incorporate the Special Exception uses and since the Special Exception was approved (See Attachment 3), this issue has been adequately addressed. However, the revised traffic study doesn't clearly show the trip generation broken out between the approved Kincora Special Exception (SPEX-2008-0054) and the proposed Kincora rezoning (ZMAP 2008-0021) a separate table is recommended to clearly show the trip generation for each. This can be in the form of an addendum to the April 27, 2009 study.

Applicant's Response (October 5, 2009): *Comment acknowledged. A separate trip generation broken out between the approved Kincora Special Exception (SPEX 2008-0054) and the proposed Kincora rezoning (ZMAP 2008-0021) is attached at the back of this memorandum.*

Current Issue Status: The applicant has provided the requested trip generation information for both the approved Kincora Special Exception and the proposed Kincora rezoning (*Attachment 1*). This data incorporates internal, mode split and pass-by trip reductions. Based on the trip generation information provided by the applicant, the approved Special Exception would generate 1,334 weekday A.M. peak hour, 1,462 weekday P.M. peak hour, 13,008 weekday and 1,049 Saturday peak hour vehicle trips. The proposed rezoning would generate 5,034 weekday A.M. peak hour, 6,226 weekday P.M. peak hour, 61,521 weekday and 3,785 Saturday peak hour vehicle trips. Issue resolved.

2. **Initial Staff Comment (First Referral April 27, 2009):** The applicant has made numerous assumptions regarding recommended/anticipated improvements to be in place in the various phases of the project. OTS believes that many of these assumptions are unrealistic given OTS' understanding of funding levels and proffered/planned improvements. OTS requests a meeting with the applicant's traffic consultant to discuss the matter before providing further comment on the analysis results.

Applicant's Response (June 10, 2009): *A meeting was held on May 27, 2009 with OTS staff to discuss the comments received on the rezoning application. Based on*

the discussion held at the meeting, there was some confusion regarding the planned roadway/transportation improvements stated in the report, which were based on the Countywide Transportation Plan. However, the analysis presented in the report did not take into account all of the planned improvements. The improvements necessary to improve or achieve the acceptable levels-of-service were the only ones included in the analysis. However, per the County staff's request, a supplemental analysis was requested without assuming planned roadway improvements as shown on the CTP for Route 28, Route 7 and Waxpool Road. Hence, intersections along Route 28, Route 7 and Waxpool Road were reanalyzed without assuming the planned improvements in place for the existing conditions. For the future conditions analysis, however, the planned interchanges were assumed to be in place, which was agreed to at the meeting. The supplemental analysis presented along with this memo shows the details of the capacity analysis results.

Issue Status (Second Referral September 4, 2009): This is understood and confirmed by OTS. However, OTS continues to believe that some of the assumed future conditions, including the assumed 8 lanes on Route 7, Route 28 and Waxpool Road improvements in the future scenarios are optimistic in that they are not currently funded. OTS recommends that the applicant participate in these improvements. This will be addressed in subsequent comments.

Applicant's Response (October 5, 2009): Please review responses to Comments #14 and 15.

Current Issue Status: See Current Issue Status for Comments #14 through #18 below.

3. **Initial Staff Comment (First Referral April 27, 2009):** The applicant has provided trip generation figures for each phase of the project as part of the traffic study. In each case, the study indicates that the figures represent new trips generated by the proposed development program for that point in time. OTS believes that the trip generation shown for each phase is actually cumulative (i.e. phase II = phase I + phase II). Is this correct? Please clarify.

Applicant's Response (June 10, 2009): That is correct. The trip generation for Phase II is cumulative of Phase I and II and the trip generation for Phase III is cumulative of Phase I, II and III.

Issue Status (Second Referral September 4, 2009): In the review of the applicant's revised traffic study, OTS staff has confirmed this. The issue has been adequately addressed.

Applicant's Response (October 5, 2009): Resolution appreciated.

Current Issue Status: Issue resolved.

4. **Initial Staff Comment (First Referral April 27, 2009):** The interchange of Route 28/Nokes Boulevard is under construction to be a full cloverleaf interchange. The interchange of Route 28/Nokes Blvd will open in phases beginning May 2009 with full operation expected in September 2009. If not provided through the applicant's special exception application, the applicant should dedicate adequate right-of-way at no cost for the purpose of construction of the interchange and a section of Gloucester Parkway that is also being constructed from Route 28 to Pacific Boulevard as a part of the Route 28/Nokes Boulevard interchange project.

Applicant's Response (June 10, 2009): *The right-of-way for the interchange has already been acquired by VDOT and the applicant no longer owns the area for this right-of-way, and that area is not included in the SPEX area.*

Issue Status (Second Referral September 4, 2009): The Kincora Special Exception has already been approved. However, there is a pending court case between the applicant and VDOT regarding the value of the property acquired by VDOT for the interchange. OTS staff notes that the interchange construction is now complete. Issue adequately addressed.

Applicant's Response (October 5, 2009): *Resolution appreciated.*

Current Issue Status: Staff notes the applicant was paid \$15.3 million for right-of-way for the interchange in a settlement with VDOT.

5. **Initial Staff Comment (First Referral April 27, 2009):** The traffic study assumes a 10% reduction for transit service. The applicant will be responsible for providing transit facilities equal to the 10% anticipated traffic reduction; in other words, the applicant should show how the traffic impact would be reduced on the adjacent roads. In terms of transit, what mitigation measures will this applicant provide to ensure the 10% reduction in trips in the vicinity of the site? Please describe.

Applicant's Response (June 10, 2009): *An interim Travel Demand Management program (TDM) will be implemented to reduce the number of vehicle trips. This includes the use of mass transit, ride-sharing and/or other strategies. A 10% TDM reduction on proposed office, hotel and residential trips. Of note, no TDM reduction was applied to the retail trips or baseball stadium. The TDM reduction was also applied to the net trips (excluding external trips). The US census data for the Broad Run District and adjacent districts was used to compile the percentage breakdown. The details of the Census data are presented in the Appendix section. The components of the TDM program, which include Carpooling/Vanpool/Ridesharing, Telework, Shuttle Bus Connections and Flex*

Work Schedule was assumed to reduce the proposed site traffic by 571 a.m. peak hour, 591 p.m. peak hour , and 152 Saturday peak hour vehicle trips.

Issue Status (Second Referral September 4, 2009): OTS requests that the applicant clarify how these reductions have been coordinated with Table 13: Trip Generation (Phase III- 2025) on pages 133-134 of the applicant's revised study. In addition, the applicant's proposed draft proffers (pages 25-28) relating to transit contributions and TDM program, including their perceived effectiveness in reducing single-occupant vehicle trips, will need review and comment by the OTS staff. As of this writing, a decision has not been made as to the validity of the proposed 10% TDM reduction by the applicant. Further review and discussion is needed.

Applicant's Response (October 5, 2009): *The TDM program for the proposed Rezoning application is based upon the TDM recommendations of the DRAFT version of the CTP and will duplicate the approved TDM program that will be implemented with the Kincora SPEX application. The Applicant is willing to meet with OTS staff to discuss this further.*

Current Issue Status: The latest draft proffers for transit facilities and services and TDM program (October 5, 2009) have been reviewed by OTS staff and are consistent with those approved for the Kincora special exception. OTS staff believes that it is reasonable to assume that the proposed transit contributions and facilities and TDM program will translate into the assumed 10% reductions for office, hotel and residential uses. This issue is resolved. However, OTS staff recommends that the draft proffers specify that adequate (20 minute) headways be provided for the proposed shuttle service mentioned in draft proffer "III. L. Kincora Shuttle" (See Comment # 19).

6. **Initial Staff Comment (First Referral April 27, 2009):** The applicant has included trip reductions for internal capture. Please provide appropriate justification/documentation for these reductions. The internal capture reductions should be confirmed with VDOT.

Applicant Response (June 10, 2009): *The 5% internal capture reduction was agreed and accepted by VDOT and County staff at the scoping meeting. The Chapter 527 guidelines also stipulate a 15% internal capture reduction for residential with a mix of non-residential components.*

Issue Status (Second Referral September 4, 2009): The question is, why 15% was applied to other non-residential uses on Table 13, pages 133-134, of the revised traffic study? The Chapter guidelines recommend using the smaller of 15% of residential or non-residential trips generated. Please clarify.

Applicant's Response (October 5, 2009): *The trip generation in the traffic study has taken into account the smaller of 15% of residential or non-residential trips generated. In this case, the residential trips were smaller than the non-residential trips; hence 15% of the residential trips were deducted from the trips generated by the residential uses and non-residential uses. VDOT has agreed with this methodology. The Chapter 527 submission has been accepted by VDOT, which upholds the calculations to be accurate and adhering to the Chapter 527 guidelines.*

Current Issue Status: The applicant has clarified that the smaller of the 15% of residential or non-residential trips generated was utilized, not both. Issue addressed.

7. **Initial Staff Comment (First Referral April 27, 2009):** The traffic impact study assumes 25% - 40% as pass-by trip reductions for the proposed development in 2015. No pass-by trip reduction should be proposed for trips on Pacific Boulevard as long as Pacific Boulevard is not connected to Russell Branch. Even if a trip reduction were allowed on Pacific Boulevard, it would not apply to ingress or egress volumes at the site entrances. The assumption of pass-by reduction should be confirmed with VDOT. In a meeting with the applicant dated April 4, 2009, the applicant indicated that the 25% pass-by trip reduction was eliminated during the Phase 1 for the SPEX. The applicant may need to clarify that in the addendum taking in consideration that 25% pass-by reduction is a high reduction number even after the connection of Pacific Boulevard.

Applicant's Response (June 10, 2009): *The 25% pass by reduction was agreed to and accepted by VDOT and County staff at the scoping meeting. The Chapter 527 guidelines also stipulate a 25% pass by reduction for retail uses. Although without the Pacific Boulevard connection to Russell Branch Parkway there will be no regional or existing traffic along the proposed section of Pacific Boulevard, the pass-by trips will be more of 'diverted trips' from Route 28. Hence, no trip reduction was applied to ingress or egress volumes at the site entrances. The total site traffic entering and leaving the entrances includes the pass-by trips.*

Issue Status (Second Referral September 4, 2009): OTS requests that the applicant clarify why the 25% pass-by reduction is shown in trip generation Table 3, for Phase 1 (year 2011) on pages 43-44 of the applicant's traffic study. Also, the proposed 40% pass-by reduction for drive-thru banks exceeds the 25% allowed under Chapter 527 and has not been documented. Please clarify.

Applicant's Response (October 5, 2009): *As mentioned in the previous response, the trip generation reductions were agreed to and accepted by VDOT and County staff at the scoping meeting. The Chapter 527 guidelines, for pass-by reductions, state: "Unless otherwise approved by VDOT, the following pass-by trip reductions may be used:*

**ZMAP 2008-0021-Kincora Village Center, OTS Third Referral Comments,
January 20, 2010**

1. *Shopping Center-25% of trips generated may be considered pass-by*
2. *Convenience stores, service stations, fast food restaurants, and similar land uses - 40% of trips generated may be considered pass-by"*

The drive-thru bank, as discussed at the scoping meeting, falls under the similar land uses described in the Chapter 527 guidelines. Hence, a 40% pass-by reduction was applied to the drive-thru bank. As mentioned earlier, the Chapter 527 submission has been accepted by VDOT, which upholds the calculations to be accurate and adhering to the Chapter 527 guidelines.

Current Issue Status: OTS has researched ITE data for the proposed retail and drive-in bank pass-by reduction percentages and found that they are within reasonable ranges. Issue addressed.

8. **Initial Staff Comment (First Referral April 27, 2009):** Given the size of the proposed development, a significant contribution towards regional transit facilities is anticipated. Further discussion with the applicant with respect to the nature of the contribution is necessary.

Applicant's Response (June 10, 2009): *Comment acknowledged. A meeting has been scheduled with County transit staff.*

Issue Status (Second Referral September 4, 2009): This meeting has already occurred and OTS staff has set forth a series of recommendations which are outlined in Comment #19.

Applicant's Response (October 5, 2009): *Please review response to Comment #19.*

Current Issue Status: See Current Issue Status in Comments # 5 and #19.

9. **Initial Staff Comment (First Referral April 27, 2009):** The Loudoun County Bicycle and Pedestrian Mobility Master Plan adopted October 20, 2003 and the CTP adopted on July 23, 2001 include policies for Pedestrian and Bicycle Facilities. The Loudoun County Bike and Pedestrian Mobility Master Plan calls for the construction of a multi-purpose trail along Pacific Blvd and Gloucester Parkway. The applicant should construct these trails and may be required to dedicate additional ROW in order to do so. In order for VDOT to maintain a trail, the trail must be built within the public right-of-way; otherwise, it is the responsibility of the applicant to maintain the trail. To ensure the safety of bicyclists and motorists all bicycle facilities must be designed according to AASHTO standards. These standards are documented in A Guide for the Development of Bicycle Facilities, AASHTO, 1999, and may be obtained through

AASHTO's website www.aashto.org. Per these standards, multi-use trails should be constructed with a 10-foot paved travel-way with 2-foot graded shoulders on both sides of the trail.

Applicant's Response (June 10, 2009): *Comment acknowledged.*

Issue Status (Second Referral September 4, 2009): The applicant has provided for trails in the draft proffer statement. Please clarify that the proposed trails are to be within the public (VDOT) right-of-way. In addition, these trails need to connect with existing trails or be set up to connect with planned future trails. Please clarify.

Applicant's Response (October 5, 2009): *The zoning plan and proffers address the location of trails that will be located within the public ROW for Pacific Boulevard and Gloucester Parkway. As Pacific Boulevard and Gloucester Parkway are constructed by the Applicant across Broad Run, they will be connected to existing trails, or will be constructed with a terminus allowing others to connect where existing trails do not exist at the connection points for Pacific Boulevard and Gloucester Parkway.*

Current Issue Status: On Sheet 18 of the plat, the Typical Section for Pacific Boulevard shows a 10-foot wide pedestrian and bike trail outside of the right-of-way. The approved Special Exception plat for Kincora also shows a 10-foot wide pedestrian and bike trail within a 14-foot wide trail maintenance easement outside the VDOT right-of-way. However, the proffer language is ambiguous as to whether the trails along public roads will be within the public road right-of-way or not. For example, proffer III. D. 1 b. **Bicycle Trail-Pacific Boulevard**, states "To the extent not located within the public right-of-way, dedicate a fourteen (14) foot wide on-site public access easement in the setback area along the west side of Pacific Boulevard, and construct a ten (10) foot wide bicycle trail on the property within the public right-of-way and/or within such public access easement along the portion of Pacific Boulevard...". The applicant needs to insure that the proposed proffer language and plat are consistent with the approved Special Exception for Kincora. Please clarify.

10. **Initial Staff Comment (First Referral April 27, 2009):** The applicant should provide a link level of service and queuing analysis for the proposed typical sections along the frontage of Pacific Boulevard.

Applicant's Response (June 10, 2009): *Comment acknowledged. The results of the queuing analysis and link LOS analysis for the proposed typical sections along the frontage of Pacific Boulevard for the years 2011, 2015 and 2025 are*

presented in Tables 1-6 in the response memo. The results are expressed in terms of 50th percentile and 95th percentile queue length (feet).

Issue Status (Second Referral September 4, 2009): The issue has been adequately addressed.

Applicant's Response (October 5, 2009): Resolution appreciated.

Current Issue Status: Issue resolved.

11. **Initial Staff Comment (First Referral April 27, 2009):** The site plan shows that most of the internal roads are private roads; therefore, they should comply with the Loudoun County Facility Standards Manual. The public roads should be compatible with VDOT standards.

Applicant's Response (June 10, 2009): Comment acknowledged.

Issue Status (Second Referral September 4, 2009): The applicant has noted this in the draft proffers. This issue has been adequately addressed.

Applicant's Response (October 5, 2009): Resolution appreciated.

Current Issue Status: Issue resolved.

12. **Initial Staff Comment (First Referral April 27, 2009):** The applicant should construct sidewalks on both sides of the internal roads. The Owner's Association (OA) will maintain all sidewalks and trails, other than those located on public ROW.

Applicant's Response (June 10, 2009): Comment acknowledged. Please refer to the revised Special Exception plat.

Issue Status (Second Referral September 4, 2009): It is unclear, however, how this is being handled with this rezoning. The draft proffers discuss the HOA responsibilities under the VII. Owners Association paragraph on pages 33-34 which appear to cover private trails and sidewalks. Please clarify.

Applicant's Response (October 5, 2009): The proffers commit the HOA to provide maintenance for trails and sidewalks located outside of the Public ROW.

Current Issue Status: Similar to Comment #9 above, the proffer language is ambiguous as to whether the trails along public roads will be within the public road right-of-way or not. The applicant needs to insure that the proposed proffer language and plat are consistent with the approved Special Exception for Kincora. Please clarify.

13. **Initial Staff Comment (First Referral April 27, 2009):** OTS will provide a review of the draft proffers once we have had a chance to evaluate the revised traffic analysis.

Applicant's Response (June 10, 2009): *Comment acknowledged.*

Issue Status (Second Referral September 4, 2009): OTS Staff has reviewed the submitted draft proffers (dated July 23, 2009) and comments are incorporated below.

Current Issue Status: The proffers will need to be modified in order to address the various outstanding transportation related issues noted in this referral.

14. **Initial Staff Comment (Second Referral September 4, 2009):** The applicant's traffic study includes an extensive review of the surrounding road network. It outlines a number of intersections which are operating below LOS D and includes recommendations for improvement in conjunction with each development phase. The issue is, however, that the applicant's draft proffers do not address transportation improvements to the various off-site intersections. The applicant needs to provide these improvements to the various intersections as laid out in the study. The study has specific recommendations (Attachment 15 in the second OTS referral), as well as with each phase, which need to be addressed in the proffers. For example, the study recommends that the Waxpool Road/Pacific Boulevard intersection include signal timing/cycle length adjustments, the addition of additional northbound and southbound left-turn bays and the addition of a 4th eastbound through lane. Yet the draft proffers are silent as to funding or construction of these needed improvements. The applicant needs to develop a phasing plan with specific improvements that address failing intersections and road widening in the general vicinity of the site. In addition, the phasing thresholds in the draft proffers don't match with the phasing in the traffic study. The specific traffic impacts of the phased development in the proposed draft proffers need to be clarified.

Applicant's Response (October 5, 2009): *The Applicant through the proposed development proffers has committed to the construction of the following regional roads in the vicinity of the proposed development:*

a. *Pacific Boulevard:*

- *Additional 2-lane section from Severn Way to Nokes Boulevard*
- *4 lane divided section with ten foot wide bicycle trail from Nokes Boulevard to Russell Branch Parkway*
- *Includes construction of the bridge required to cross Broad Run with such 4-lane section and a ten foot wide bicycle trail*

- *Approximate cost associated with construction of the bridge = \$12,000,000*

b. Gloucester Parkway:

- *4-lane section with ten foot wide bicycle trail from the planned terminus of Route 28/Gloucester Parkway interchange to Loudoun County Parkway*
- *Includes construction of the bridge required to cross Broad Run with such 4-lane section and a ten foot wide bicycle trail*
- *Approximate cost associated with construction of the bridge= \$32,000,000*

The roadway links mentioned above are shown on the Countywide Transportation Plan (CTP) and are critical sections/links required in eastern Loudoun in order to provide alternative parallel routes to Waxpool Road, Route 7 and Route 28. The traffic study shows that the additional capacity that will be generated by constructing Pacific Boulevard and Gloucester Parkway links will be used by site generated as well as regional traffic in the area. Figure 1 displays the additional capacity that will be generated by the construction of these roadway links and surplus capacity that will be available, which will be mostly utilized by regional traffic in the area.

As is the case with standard travel demand forecasting and trip distribution models, in areas where roadway links are operating at optimal capacity, construction or addition of parallel links to existing network helps alleviate the traffic from the existing roadway links. In this case, the proposed development will generate traffic that will primarily use the two roadway links (Gloucester Parkway and Pacific Boulevard), and will to some extent trickle site traffic in to the existing regional roads such as Route 7, Route 28 and Waxpool Road. However, the additional or surplus capacity that will be generated by constructing the two critical links (Gloucester Parkway and Pacific Boulevard) will be far greater than the volume added to the regional roads such as Route 7, Route 28 and Waxpool Road.

*In addition, the cost associated with constructing the bridge sections for both the roadway links to cross Broad Run (Pacific Boulevard and Gloucester Parkway) is approximately \$44,000,000 (Design and Construction). Based on the Fair Share calculations presented in the traffic study, approximately 40% of the traffic utilizing the Pacific Boulevard connection and approximately 60% of the traffic utilizing the Gloucester Parkway connection will be regional traffic. To be conservative, even if only the Gloucester Parkway connection is accounted for regional improvement contribution, the regional contribution just based on the construction of Gloucester Parkway equates to approximately $\$32,000,000 * 60\% = \$19,000,000$.*

Hence, with the construction of regional roadway links as part of the proposed development, the roadway capacity generated exceeds the volume of traffic

generated by the proposed development plus regional traffic utilizing these roadway links. Hence, the utilization of the proposed roadway links by regional traffic plus the availability of surplus capacity, more than mitigates or negates the minor off-site impacts from the trips generated by the proposed development.

Current Issue Status: The applicant's response is to forego the OTS recommended off-site improvements and to continue to only provide two road improvements, namely (1) the construction of Pacific Boulevard with a connection to Russell Branch Parkway, and (2) the construction of Gloucester Parkway between Pacific Boulevard and Loudoun County Parkway. The applicant notes that by constructing these facilities, excess capacity is being provided for other non-site traffic. Regardless of these proposed improvements, however, OTS notes that the off-site impacts of the proposed Kincora development will significantly impact the surrounding road network, and these impacts have not been adequately addressed. The applicant's traffic study details significant impacts resulting from Kincora site-generated traffic to the Waxpool Road/Farmwell Road corridor, including the intersections with Pacific Boulevard, Loudoun County Parkway, Smith Switch Road and Ashburn Village Boulevard. Similar impacts are shown along Loudoun County Parkway, including the intersections with Russell Branch Parkway, Gloucester Parkway, and Waxpool Road. Site-generated traffic distributions are depicted in *Attachment 2*.

Based on the Applicant's traffic study, OTS recommends that the Applicant mitigate its impacts on the surrounding road network by constructing the road improvements outlined below, and/or by delaying development as noted until particular road improvements are in place, regardless of whether or not a CDA is approved for this site.

**Prior to Commencement of Phase 1 of Development (2011 in Traffic Study)
(i.e., "up-front" improvements):**

- Construction of a four-lane divided (U4M) segment of Gloucester Parkway between Pacific Boulevard and Loudoun County Parkway.
- Construction of a four-lane undivided (U4) segment of Smith Switch Road between Hastings Drive and Gloucester Parkway, including a grade-separated crossing of the W & OD Trail.
- Construction of a four-lane divided (U4M) segment of Pacific Boulevard from Gloucester Parkway/Nokes Boulevard to the northernmost entrance for the Phase 1 development on the site (four-lane segment is consistent with the approved stadium SPEX

application).

- **Construction of an additional left turn lane on northbound Pacific Boulevard to westbound Waxpool Road.**

The above recommended improvements will address existing traffic congestion in the vicinity of the application. The applicant's traffic study notes that Waxpool Road/Farmwell Road corridor is currently experiencing failing levels-of-service at several intersections. These include the Farmwell Road/Ashburn Village Boulevard, Farmwell Road/Waxpool Road/Smith Switch Road, Waxpool Road/Loudoun County Parkway and Waxpool Road/Pacific Boulevard intersections. The study notes that an interchange will be needed to address the failing LOS at the Waxpool Road/Loudoun County Parkway intersection. The additional traffic from the proposed development will exacerbate an already failing road network. Providing the up-front construction of Gloucester Parkway and Smith Switch Road will help address key levels-of-service issues and facilitate travel alternatives to the congested roads in the vicinity of the proposed development.

Prior to Commencement of Phase 2 of Development (2015 in Traffic Study):

- **Construction of a four-lane divided (U4M) connection of Pacific Boulevard to Russell Branch Parkway.**
- **Construction of an additional left-turn lane from eastbound Waxpool Road to northbound Pacific Boulevard.**
- **Construction of a free-flow right-turn lane from eastbound Waxpool Road to southbound Pacific Boulevard.**

The applicant's traffic study indicates that the Loudoun County Parkway will need to be expanded from four to six lanes prior to Phase 2. Providing the recommended connection of Pacific Boulevard to Russell Branch Parkway at this juncture will provide an alternative to Loudoun County Parkway for site traffic to and from Route 7. The recommended improvements to the Waxpool Road / Pacific Boulevard intersection will improve traffic flow at this intersection.

Prior to Commencement of Phase 3 of Development (2025 in Traffic Study):

- **Widening of Gloucester Parkway to a six-lane divided (U6M) section between Pacific Boulevard and Loudoun County Parkway.**
- **Fair-share cash contribution (15%) towards future interchange at Waxpool Road and Loudoun County Parkway.**

- **Waxpool Road/Loudoun County Parkway interchange must be in place and open to traffic.**
- **Six-lane divided (U6M) section of Farmwell Road/Waxpool Road must be in place and open to traffic between Ashburn Road and Loudoun County Parkway.**

The traffic study indicates that by this phase, Gloucester Parkway and Farmwell Road will need to be widened from four to six lanes and that a grade separated interchange is needed to address the congestion at the Waxpool Road / Loudoun County Parkway intersection. The applicant has the choice of either waiting for these improvements to be in place by others or completing them prior to Phase 3 development.

For each phase of improvements listed above, signalization and/or signal modification (as warranted by VDOT) and construction of turn lanes (as required by VDOT) at intersections along and within the above road segments are recommended to also be the responsibility of the Applicant. Acquisition of necessary ROW and construction-related easements for the improvements listed above should also be the responsibility of the Applicant.

Additionally, the Applicant should confirm that sufficient ROW has been provided along the frontage of this site for the ultimate planned widening of Route 7 and Route 28 to eight-lane divided (U8M) sections. If not already provided, the Applicant should agree to dedicate such land to the County and/or VDOT at no public cost.

- 15. Initial Staff Comment (Second Referral September 4, 2009):** The applicant's traffic study notes, on page xi, that Route 7 and Route 28 will require widening to 8 lanes in the vicinity of the site. In addition, the study also notes that Waxpool Road and Loudoun County Parkway will require major lane improvements. Please note that there are no public funds to provide these needed future widenings. The applicant's draft transportation proffers do not address these improvements even though the proposed development, even when allowing for all of the proposed reductions as well as the approved portion of Kincora under SPEX 2008-0054, the proposed development will generate approximately 5,200 a.m. peak hour, 6,600 p.m. peak hour and 62,000 daily vehicle trips. The proposed development will heavily impact the proposed road network. The applicant needs to make significant contributions and construction to the surrounding road network including Route 7, Route 28, Waxpool Road and Loudoun County Parkway to offset the site generated traffic impacts. This would also include widening the two-lane segment of Pacific Boulevard between Nokes Boulevard and Severn Way and the two-lane segment of Loudoun County

Parkway in the vicinity of the Redskins Park Drive and Gloucester Parkway.

Applicant's Response (October 5, 2009): *As presented in response to comment #14, the applicant has committed to the construction of two major roadway links identified on the CTP-Pacific Boulevard connection from Severn Way to Russell Branch parkway and Gloucester Parkway from Route 28/Nokes Boulevard interchange terminus to Loudoun County Parkway. The cost associated with construction of these roadway links and the percentage of fair share site traffic utilizing these links shows that the proposed improvements will provide mitigation measures in excess of that necessary to accommodate the impacts from the proposed development.*

The applicant has committed to the construction or widening of the two-lane segment of Pacific Boulevard between Nokes Boulevard and Severn Way. Please refer to the draft proffers dated October 5, 2009.

As mentioned in response to comment # 14, by constructing Pacific Boulevard section from Severn Way to Russell Branch Parkway, a much needed parallel north-south road to Route 28 and Loudoun County Parkway will be in place.

This north-south link will serve site generated and regional traffic between Route 7 and Waxpool Road. Hence, by constructing this critical regional roadway link, the applicant has accounted for any other off-site impacts from trips generated by the proposed development. The traffic study shows that the widening of the Loudoun County Parkway section in the vicinity of Redskins Park Drive and Gloucester Parkway is required solely due to background/regional traffic and is not attributed to site generated traffic. By constructing Pacific Boulevard as a four-lane roadway parallel to Loudoun County Parkway and Route 28, the applicant has in fact provided another avenue for regional traffic traversing in the north south direction.

Current Issue Status: See Current Issue Status in Comment #14 above.

16. **Initial Staff Comment (Second Referral September 4, 2009):** In the event the Board of Supervisors does not create a community development authority (CDA), the applicant proposes to provide transportation improvements in accordance with phased development in the draft proffers. The applicant's transportation proffers focus primarily on the internal development of Pacific Boulevard, the extension of Pacific Boulevard north to connect with Russell Branch Parkway and the extension of Gloucester Parkway west from the site to Loudoun County Parkway. The connection of Pacific Boulevard north to Russell Branch Parkway is proposed to come relatively late in the proposed development phasing. The applicant's draft proffers, in III Transportation D5 on page 21, indicate that Pacific Boulevard will not be connected off-site to the north to Russell Branch Parkway until zoning permits are issued for 1,700,001 square feet of non-

residential uses, the 501st hotel room or the 1,069th residential unit. This means that up to 1,700,000 square feet of non-residential, 500 hotel rooms and 1,068 residential units could be constructed on-site without any connection of Pacific Boulevard to the north or Gloucester Parkway to the west. Assuming the townhouse/condo, hotel and office park (and not the higher retail) trip rates for the above land use totals from the applicant's traffic study, this level of proposed development would generate over 31,000 daily vehicle trips and continue to rely on the existing Route 28/Nokes Boulevard interchange as well as the failing Waxpool Road/Pacific Boulevard intersection to the south and other failing intersections in the vicinity. This is not acceptable. It is recommended that the applicant connect Pacific Boulevard north to Russell Branch Parkway with access west to Loudoun County Parkway much earlier in the development process. This is because many of the intersections adjacent to the site are shown in the traffic study to operate at inadequate levels-of-service currently and in the future. It is recommended that the applicant tie the off-site extension of Pacific Boulevard to an earlier development threshold. For example, the Waxpool Road/Pacific Boulevard and Waxpool Road/Loudoun County Parkway intersections are failing now and any additional site traffic will simply exacerbate the delays. At the same time, OTS recognizes that the cost of constructing this improvement will require a certain development threshold. However, OTS recommends a significantly lower maximum development threshold prior to the completion of the Pacific Boulevard connection to Russell Branch Parkway. Further discussion is needed.

Applicant's Response (October 5, 2009): *The traffic study shows that the Proposed transportation roadway phasing is capable of handling the proposed phased development program. As acknowledged by the reviewer, the cost of constructing the Pacific Boulevard link and bridge connection is approximately \$12,000,000, which will require the stipulated development threshold identified in the proffer conditions. In addition, as noted by the Applicant in the proffer conditions, in the event the Board of Supervisors creates for the Property a community development authority (CDA), the Applicant has committed to construct Gloucester Parkway and Pacific Boulevard connections within three (3) years of the date the CDA is created by the Board. Further discussion is required (Regarding timing of Pacific Blvd. connection).*

Current Issue Status: See Current Issue Status in Comment #14 above.

17. **Initial Staff Comment (Second Referral September 4, 2009):** Similar to Comment 16 above, in the absence of a CDA, the applicant includes phasing in the draft proffers for the proposed connection of Gloucester Parkway from Route 28 to Loudoun County Parkway. It is recommended that this connection occur much earlier in the development phasing than proposed by the applicant. The applicant's draft proffers call for the extension of Gloucester Parkway prior to the issuance of 2,400,001 square feet of non-residential uses. Assuming this proposed development is 100% office park and not the higher retail traffic generators, this

**ZMAP 2008-0021-Kincora Village Center, OTS Third Referral Comments,
January 20, 2010**

would add over 7,700 daily vehicle trips over and above the traffic (approximately 31,000 daily vehicle trips) noted in comment 16. It is recommended that this improvement be in place prior to the completion of the Phase I (year 2011) development. At the same time, OTS recognizes that the cost of constructing Gloucester Parkway between Route 28 and the Loudoun County Parkway will require a certain development threshold. However, OTS recommends a significantly lower maximum development threshold prior to the completion of the Gloucester Parkway to Loudoun County Parkway. Further discussion is needed.

Applicant's Response (October 5, 2009): *The traffic study shows that the proposed transportation roadway phasing is capable of handling the proposed phased development program. As acknowledged by the reviewer, the cost of constructing the Gloucester Parkway link and bridge connection is approximately \$32,000,000, which will require the stipulated development threshold identified in the proffer conditions. In addition, as noted by the Applicant in the proffer conditions, in the event the Board of Supervisors creates for the Property a community development authority (CDA), the Applicant has committed to construct Gloucester Parkway and Pacific Boulevard connections within three (3) years of the date the CDA is created by the Board.*

Further discussion is required (Regarding timing of Gloucester Pkwy. Connection)

Current Issue Status: See Current Issue Status in Comment #14 above.

18. **Initial Staff Comment (Second Referral September 4, 2009):** The applicant's traffic study recommends that the Waxpool Road/Loudoun County Parkway intersection will need to be converted into a grade separated interchange. The applicant's traffic study indicates that over 25% of the site traffic would traverse through this intersection. Therefore, the applicant's draft proffers need to address amelioration including a significant contribution including an interchange study. Please note that this interchange is not included in the current CTP. This potential improvement needs to be discussed as part of the ongoing CTP update for possible inclusion.

Applicant's Response (October 5, 2009): *The total site generated traffic at the intersection of Waxpool Road/Loudoun County Parkway for future conditions is approximately 15%. However, as shown in the traffic study, 10% of the existing traffic travelling southbound on Loudoun County Parkway and turning left to travel eastbound on Waxpool Road was rerouted to use the proposed Gloucester Parkway link. In addition, similarly, trips generated by background developments in the vicinity of Loudoun County Parkway shown in Figure 36 of the Traffic Impact Study, were rerouted to use the proposed Gloucester Parkway link. The additional volume imposed from the proposed development on Route 7 or*

Waxpool Road is mitigated by providing additional capacity to accommodate regional/existing traffic that will be diverted from Waxpool Road and Route 7 to utilize the proposed Gloucester Parkway link. Hence, the proposed Gloucester Parkway link provides the much-needed east-west alternative corridor to Waxpool Road and Route 7. By committing to construct this link, and attracting existing + regional traffic along with the site traffic, the applicant indirectly has committed to mitigate the impacts from site generated traffic along Waxpool Road and Route 7.

Current Issue Status: See Current Issue Status in Comment #14 above.

19. Initial Staff Comment (Second Referral September 4, 2009): Transit-related recommendations for this application, including a per unit transit contribution, have been discussed with the OTS transit manager. These include:

- Removal of the proposed temporary community parking lot described under draft proffer I. under III Transportation on page 25.
- Provision of \$575 per dwelling unit for use in providing transit and please insure that the applicant's proposed TDM program is identical to that approved under the Kincora Village Office/Recreational Complex under SPEX 2008-0054.
- Insure that the proposed bus shelters included under draft proffer J. under III Transportation on page 25 are in addition to the approved shelters under the Kincora Village Office/Recreational Complex under SPEX 2008-0054. Also, there needs to be language included in which the applicant will design and locate the proposed bus shelters with approval from the Loudoun County OTS staff.
- Under draft proffer L. Employee /Shuttle, it is recommended that this be a general service to serve the site with adequate (20 minutes recommended) headways and not limited to employees only. This would include changing the name to the Kincora Shuttle. Also, the draft proffer for this needs to be revised such that the 1,500,000 square feet threshold would include the square footage already approved under the Kincora Village/Office/Recreational Complex approved under SPEX 2008-0054. This service needs to be privately funded and operated. The phrase in the last sentence of draft proffer I "...provided there are uses located in Land Bays L, N, and Q that generate ridership demand deemed sufficient for such shuttle service." needs to be deleted as it would limit service.

- Finally, the proffers need to note that the specifications of this service will need review and approval from OTS.

Applicant's Response (October 5, 2009): *The revised proffers dated October 5, 2009 address the specifications of this service.*

Current Issue Status: The most recent (October 5) draft proffers adequately addressed the majority of the comments raised. The draft proffers have deleted the proposed temporary community parking lot, provided the \$575 per dwelling unit transit contribution and clarified that the bus shelters shall be in addition to those required with the Kincora special exception (SPEX 2008-0054). In addition, the Kincora shuttle proffer has been expanded to include residents as well, and the proffers adequately replicate the TDM and transit-related conditions included with the Kincora special exception (SPEX 2008-0054). However, the proffers do not specifically commit to adequate (20 minute) headways. Such a commitment should be provided.

20. **Initial Staff Comment (Second Referral September 4, 2009):** In the applicant's draft proffers under III Transportation F. Traffic Signalization on page 24, the proposed \$160,000 set forth as a cash equivalent for signals is inadequate and is recommended to be \$300,000 in keeping with current cost estimates for the design and construction of a traffic signal. Please note that the conditions approved for the Kincora Village Special Exception (SPEX 2008-0054) condition the applicant to fund all signalization costs without a dollar cap. Also, it is unclear as to the number and location of these signals in the proffers. Please clarify.

Applicant's Response (October 5, 2009): *The proffers state that signal warrant studies will be conducted at all site entrances providing full access along Pacific Boulevard for each phase. If the studies show that a signal is warranted, the applicant has committed to the installation of these traffic signals. In addition to the site entrances along Pacific Boulevard, the applicant is also committed to provide traffic signal at the intersection of Gloucester Parkway and Pacific Boulevard, if it has not been provided by others and subject to the approval of a traffic signal warrant study to VDOT. The cash equivalent amount has been adjusted in the revised proffers.*

Current Issue Status: The applicant has raised the cash equivalent from \$160,000 to \$275,000 under proffer F., Traffic Signalization, for each traffic signal which is a significant improvement. However, for "4 by 4" intersections (four lanes for each approach), this amount needs to be raised to \$300,000. In addition, it needs to be clarified that the signals will be provided if warranted by VDOT and/or Loudoun County and that the proposed signal estimates are subject to County approval. Further

clarification is needed.

21. **Initial Staff Comment (Second Referral September 4, 2009):** In the applicant's draft proffers, under III. Transportation C. Construction of Public Roads With A Community Development Authority (CDA) on pages 16-17, input from the County Attorney's Office is recommended. This is a road funding mechanism proposed by the applicant as an option to construct public roads.

Applicant's Response (October 5, 2009): *Comment noted.*

Current Issue Status: Review by the County Attorney's Office is pending. Once completed, it will then be determined if and how the CDA concept can move forward. Please note that Board approval of the CDA is also required. OTS defers to the County Attorney's Office for further comments regarding the CDA.

22. **Initial Staff Comment (Second Referral September 4, 2009):**The proposed trip distribution percentages need to be better clarified in the immediate vicinity of the site for each of the proposed phases. This will help to clarify the impacts of site traffic in the immediate vicinity of the roads.

Applicant's Response (October 5, 2009):*The traffic study provides separate graphics showing total site trips and site trips by each land use (office, residential and retail) for each study intersection for each phase. The site trip distribution shown in the graphics is not limited to site entrances, but also all regional intersections in the area identified in the scope. The graphics are attached at the back of this memorandum.*

Current Issue Status: The applicant's traffic consultant has provided these graphics (dated November 18, 2009) which are included as *Attachment 2*.

23. **Initial Staff Comment (Second Referral September 4, 2009):**The proposed signal timing modifications proposed in the study for the Route 7/City Center Boulevard intersection need to be reviewed in light of the Wells Study for the Dulles Town Center application dated October 1, 2008, and subsequent study dated June 18, 2009, with VDOT. Further discussion is recommended.

Applicant's Response (October 5, 2009):*Comment noted. The signal timing modifications in the study for the intersection of Route 7/City Center Boulevard were suggested under background conditions. Of note, Dulles Town Center was considered as a background development.*

Current Issue Status: OTS has no further comment on this issue with respect to this application.

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Conclusion

To date, the Applicant's responses have not indicated a desire to provide additional off-site improvements necessary to allow the development to move forward per applicable policies contained in the 2001 Revised CTP and to mitigate the development's impacts on an already overburdened road network. Therefore, OTS cannot recommend approval of the application in its current form. However, OTS would look favorably on this application subject to the provision of the road improvements and other commitments as outlined in this referral. OTS staff looks forward to further discussions in upcoming Planning Commission worksessions.

Attachments

1. Kincora Trip Generation Information.
2. Kincora Fair Share Percentage of Site Traffic-Offsite Roadway Links/Intersections.

cc: Terrie Laycock, Director, OTS
Andrew Beacher, Assistant Director, OTS
Nancy Gourley, Transit Division Manager, OTS
Lou Mosurak, Senior Coordinator, OTS

Proposed Special Exception Application Only (Full Build-Out Year = 2015)

Land Use	ITE Code	Size	Units	Weekday						Saturday			
				AM Peak Hour			PM Peak Hour			Daily	Peak Hour of Generator		
				In	Out	Total	In	Out	Total	Total	In	Out	Total
CURRENTLY DESIGNATED USE - KEYNOTE EMPLOYMENT													
Office and Civic Uses (90%)													
Office Park	750	1,050.2	kSF	1,391	171	1,562	193	1,184	1,377	11,353	110	38	148
PROPOSED PLAN - MIXED USE DEVELOPMENT													
Office Development													
Office Park	750	901.2	kSF	1,223	151	1,374	168	1,029	1,197	9,800	94	33	127
Subtotal Office Development		901.2	kSF	1,223	151	1,374	168	1,029	1,197	9,800	94	33	127
Mode Split Reduction		10%		-123	-15	-138	-17	-103	-120	-980	-10	-3	-13
Subtotal Office Development		901.2	kSF	1,100	136	1,236	151	926	1,077	8,820	84	30	114
Retail Development													
Shopping Center	820	74.0	kSF	80	51	131	247	267	514	5,584	371	341	712
Pass-by Reduction		25%		-20	-13	-33	-62	-67	-129	-1,396	-93	-85	-178
Subtotal Retail Development		74.0	kSF	60	38	98	185	200	385	4,188	278	256	534
Stadium													
Baseball Stadium		5,500.0	Seats	N/A	N/A	N/A	N/A	N/A	N/A	N/A	386	15	401
Total Proposed Site Trips (Without Reductions)		975.2	kSF	1,303	202	1,505	415	1,296	1,711	15,384	851	389	1,240
Total Reduced Trips				-143	-28	-171	-79	-170	-249	-2,376	-103	-88	-191
TOTAL PROPOSED SITE TRIPS (WITH REDUCTIONS)		975.2	kSF	1,160	174	1,334	336	1,126	1,462	13,008	748	301	1,049
Difference In Trips (Proposed - Planned)				-231	3	-228	143	-58	85	1,655	638	263	901
% Difference (Proposed - Planned)				-17%	1%	-15%	38%	-5%	5%	11%	246%	84%	175%

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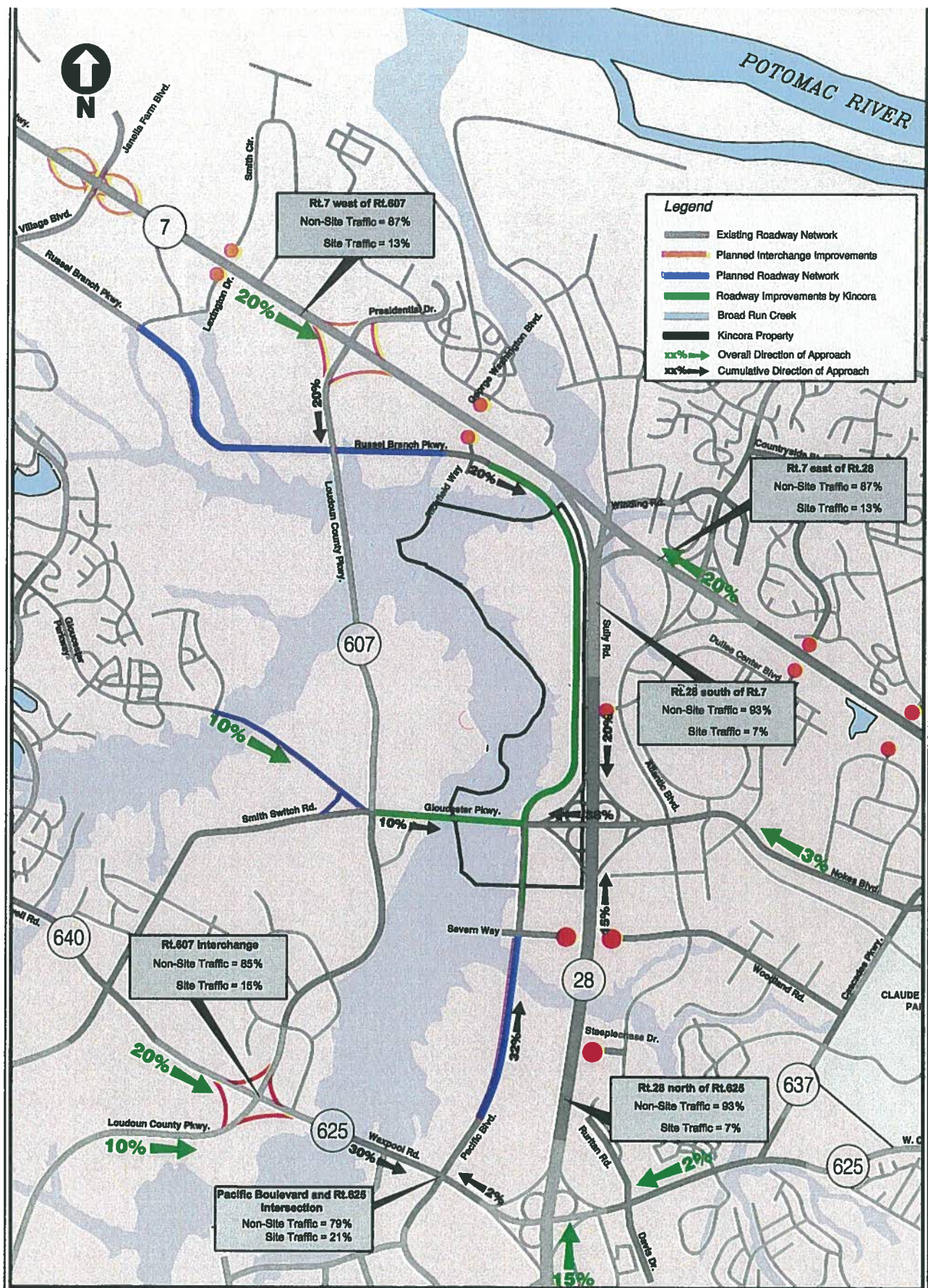
ATTACHMENT 1

Proposed Rezoning Application Only

Land Use	ITE Code	Size	Units	Weekday						Saturday			
				AM Peak Hour			PM Peak Hour			Daily	Peak Hour of Generator		
				In	Out	Total	In	Out	Total	Total	In	Out	Total
PROPOSED PLAN - MIXED USE DEVELOPMENT													
Residential Development													
Townhouses/Condos	230	1,400	DU	73	354	427	352	172	524	12,180	243	206	449
Internal Trip Reduction		15%		-11	-54	-65	-53	-26	-79	-1,827	-37	-31	-68
Mode Split Reduction		10%		-8	-35	-43	-36	-17	-53	-1,218	-25	-20	-45
Subtotal Residential Development		1,400	DU	54	265	319	263	129	392	9,135	181	155	336
Office Development													
Hotel	310	720	Rooms	289	184	473	226	199	425	6,071	282	220	502
Office Park	750	3,098.8	kSF	3,451	426	3,877	540	3,316	3,856	32,699	322	112	434
Subtotal Office Development		3,818.8	kSF	3,740	610	4,350	766	3,515	4,281	38,770	604	332	936
Internal Trip Reduction		15%		-45	-9	-54	-17	-34	-51	-1,188	-15	-18	-33
Mode Split Reduction		10%		-374	-61	-435	-77	-352	-429	-3,877	-61	-33	-94
Subtotal Office Development		3,818.8	kSF	3,321	540	3,861	672	3,129	3,801	33,705	528	281	809
Retail Development													
Shopping Center	820	335.0	kSF	198	126	324	668	723	1,391	14,902	988	912	1900
Health/Fitness Club	492	35.0	kSF	19	24	43	73	69	142	1,153	46	45	91
Drive-in Banks	912	16.0	kSF	111	87	198	366	366	732	3,175	303	291	594
High-Turnover (Sit-Down) Restaurants	932	40.0	kSF	240	221	461	267	170	437	5,086	504	296	800
Subtotal Retail Development		426.0	kSF	568	458	1,026	1,374	1,328	2,702	24,316	1,841	1,544	3,385
Internal Trip Reduction		15%		-9	-2	-11	-9	-19	-28	-639	-15	-17	-32
Pass-by Reduction (Bank)		40%		-45	-35	-80	-147	-146	-293	-1,270	-122	-116	-238
Pass-by Reduction (Retail)		25%		-50	-31	-81	-167	-181	-348	-3,726	-247	-228	-475
Subtotal Retail Development		426.0	kSF	464	390	854	1,051	982	2,033	18,681	1,457	1,183	2,640
Civic Use													
Performing Arts Center*		375.0	kSF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Proposed Site Trips (Without Reductions)				4,381	1,422	5,803	2,492	5,015	7,507	75,266	2,688	2,082	4,770
Total Reduced Trips				-542	-227	-769	-506	-775	-1,281	-13,745	-522	-464	-985
TOTAL PROPOSED SITE TRIPS (WITH REDUCTIONS)				3,839	1,195	5,034	1,986	4,240	6,226	61,521	2,166	1,618	3,785

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Kincora Development

Figure 4: Fair Share Percentage of Site Traffic - Offsite Roadway Links/Intersections (2025)

November 18, 2009



GOROVE / SLADE ASSOCIATES, Inc.
TRANSPORTATION, TRAFFIC, and PARKING

1140 Connecticut Avenue NW / Suite 700 / Washington, DC 20036 / (202) 296-8825
2914 Centerville Road / Suite 230 / Chesapeake, VA 20811 / (703) 787-8985

County of Loudoun
Office of Transportation Services
MEMORANDUM

DATE: September 4, 2009

TO: Judi Birkitt, Project Manager, Planning Department

FROM: George Phillips, Senior Transportation Planner

SUBJECT: ZMAP 2008-0021, Kincora Village Center
Second Referral

Background

In response to initial OTS comments dated April 27, 2009, included in *Attachment 1*, the Applicant, NA Dulles Real Estate Investor LLC, has provided a revised traffic study and response to comments from Gorove/Slade dated April 27, 2009 and June 10, 2009 respectively. The Applicant has also provided a revised statement of justification and proffer statement dated July 23, 2009 and concept plan dated October, 2008 and stamped July 21, 2009 by Eric Siegel, engineer, with Urban Engineering. Access to the proposed site will be provided along the future Pacific Boulevard, the Nokes Boulevard/Route 28 interchange, and from Gloucester Parkway as shown in *Attachment 2*.

The applicant has submitted a request asking the Board of Supervisors (BOS) to create a Community Development Authority (CDA) as shown in *Attachment 3*. If the BOS approves the CDA, the owner would dedicate a right-of-way to the County or VDOT for the ultimate conditions of road improvements (including segments of Gloucester Parkway and Pacific Boulevard/Russell Branch Parkway) with the funding to be provided by the CDA. The transportation improvements would be implemented within 3 years of the date the CDA is created by the BOS. Without the CDA, improvements would be phased in over the build out of the project.

Based on the Applicant's revised traffic study, the proposed land uses remain as originally proposed with 1,400 multi-family residential units, 4,000,000 square feet of office park use, 720 hotel rooms including hotel/conference center uses, 500,000 square feet of support retail and a 375,000 square-foot performing arts center. The baseball stadium, 901,211 square feet of office and 74,000 square feet of auxiliary uses has already been approved by the Loudoun County Board for Kincora Village-Office/Recreational Complex under SPEX 2008-0054 on July 21, 2009 (*Attachment 4*).

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The Applicant's revised traffic study already includes these uses. The approved Kincora Village-Office/Recreational Complex and proposed Kincora Village development will be constructed in the southwest and northwest quadrants of the Nokes Boulevard and Sully Road (Route 28) interchange.

Existing, Planned, and Programmed Roads

The following main roads are either existing or are planned facilities serving the subject site:

Route 7: The existing condition of Route 7 in the vicinity of this site is a six-lane/200 foot Right of Way (ROW), median divided, principal arterial with controlled access. Left and right turn lanes are required at all intersections. Design speed and median crossover spacing are variable. The Countywide Transportation Plan (CTP) states that bicycle/pedestrian facilities must be considered in the road's design and may require additional ROW. The CTP calls for Route 7 to remain as a 6 lane facility with grade-separated interchanges. The traffic impact study indicates that Route 7 will be required to be widened to eight lanes and have grade separated interchanges in order to handle 2025 forecasted traffic. An 8-lane section between Leesburg and Route 28 is also being considered in the current Planning Commission draft of the CTP.

Route 28: Route 28 (Sully Road) is a principal arterial, six-lane, median-divided, controlled access road with grade-separated interchanges that have been constructed at Route 625, Route 606, and Sterling Boulevard. In the vicinity of the site, the Route 28/Nokes Boulevard interchange is open to traffic. Ultimately Route 28, as shown on the Countywide Transportation Plan (CTP) is planned to be an 8-lane, limited access freeway. The current PC draft CTP shows Route 28 being 10 lanes from Route 606 south to the Fairfax County line.

Pacific Boulevard: In the CTP, Pacific Boulevard in this vicinity is planned to be a 4-lane, undivided road in a 70-foot right-of-way and would traverse the eastern edge of the site. Currently, Pacific Boulevard is constructed as a 2-lane road from Nokes/Gloucester Parkway to West Severn Way in the vicinity of the site's southern boundary. The segment of Pacific Boulevard north of Nokes/Gloucester Parkway Pacific Boulevard is not yet constructed but is conditioned to be built to the northern boundary of the Kincora Village Office/Recreational complex as approved under SPEX 2008-0054. The CTP states that bicycle/pedestrian facilities must be considered in the design and may require additional ROW. The approved Kincora Village, under SPEX 2008-0054, includes conditions which provide for dedication and construction of Pacific Boulevard on-site as a four lane divided road from Gloucester Parkway to northern most entrance. This is to occur prior to the issuance of the first occupancy permit for either the recreational facility or office uses that exceed 300,000 square feet. In addition, the applicant is committed to provide a trail on the west side of Pacific Boulevard and dual left turn lanes from southbound Pacific Boulevard onto eastbound Gloucester Parkway.

Gloucester Parkway: Gloucester Parkway section is also planned to traverse the site,

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extending west from Nokes Boulevard. This portion of Gloucester Parkway is also yet to be constructed. The functional classification for Gloucester Parkway is a Major Collector. The ultimate condition for Gloucester Parkway is a U6M, controlled access, median-divided, urban collector with a grade-separated interchange at Route 28. Left- and right-turn lanes are required at all intersections. A forty-five (45) mph design speed and desirable median crossover spacing of 800 feet are also required. The six-lane road requires a 120-foot ROW, plus land dedication for turn lanes at intersections. Bicycle/pedestrian facilities must be considered in the design and may require additional ROW.

Loudoun County Parkway: Loudoun County Parkway has been paved between Route 7 and Route 625. It is a 4-lane, median divided, controlled access, minor arterial with left and right turn lanes at all intersections except between Redskins Park Drive and Gloucester Parkway which is a two lane facility. The ultimate CTP plan for Loudoun County Parkway is a U6M section in a 120-foot right-of-way. The CTP states that bicycle/pedestrian facilities must be considered in the design and may require additional ROW.

Waxpool Road: The site is located north of Waxpool Road (Route 625), currently a 4-lane, median divided, major collector road. The CTP calls for the ultimate condition for this segment of Route 625 to be a limited access, median-divided, 6-lane road with a minimum 120-foot right-of-way, plus land dedication required for left and right turn lanes. The design speed is 45 mph and the desirable median crossover is 700 feet.

Level-Of-Service Policies

The Loudoun Countywide Transportation Plan (CTP) includes LOS policies (*Attachment 5*) which note that land development will occur only on roads that function at LOS D or better.

Review of Applicant's Revised Traffic Study

In response to initial OTS comments, the applicant has provided a revised traffic study from Gorove/Slade dated April 27, 2009. Discussed below is a summary of the study including trip generation, trip distribution, level-of-service review and a description of study recommendations for each proposed phase of development.

Trip Generation

The traffic study shows the site trip generation calculation for years 2011, 2015, and 2025 of the proposed plan using the Institute of Transportation Engineers (ITE), Trip Generation, 7th Edition. The traffic study includes the traffic associated with the approved uses (900,000 gsf Office and the 5,000 seat baseball stadium) under Kincora Village, SPEX 2008-0054. These are shown in *Attachments 6-8* respectively. Trip generation reductions were assumed for the internal trips, the pass by trips, and the mode

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split reduction. The attached tables below reflect the traffic study data and show the difference between the currently approved uses and the proposed development program for each of the phase years (2011, 2015 and 2025.)

Trip Generation Summary and Comparison-2011 (Phase 1)

Proposed Development Program*	Gross Trips Generated by Proposed Development Program	TDM Reductions Proposed in Traffic Study	Net Trips Generated by Proposed Development	Allowable By-Right Uses (PD-IP at 0.4 FAR)	Difference (Proposed Net vs. Approved)
700 Townhouses	1,958 AM Peak Hour;	15% Internal Reduction for Residential, Office and Retail;	1,657 AM Peak Hour;	1,562 AM Peak Hour;	+95 AM Peak Hour;
270 Hotel Rooms	2,472 PM Peak Hour;		2,011 PM Peak Hour;	1,377 PM Peak Hour	+634 PM Peak Hour;
1,170,000 sq ft Office Park	26,761 Weekday;	10% mode split reduction for Residential and Office	20,930 Weekday;	11,353 Weekday;	+9,577 Weekday;
150,000 sq ft Retail	2,091 Saturday Peak Hour	25% Pass-by reduction for Retail	1,678 Saturday Peak Hour	148 Saturday Peak Hour	+1,530 Saturday Peak Hour
5,500 seat Baseball Stadium					

*This includes the approved 900,000 square feet of office uses and the 5,500 seat stadium approved with Kincora Village, SPEX 2008-0054 which carries forward into all development phases.

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Trip Generation Summary and Comparison-2015 (Phase 2)

Proposed Development Program	Gross Trips Generated by Proposed Development Program	TDM Reductions Proposed in Traffic Study	Net Trips Generated by Proposed Development	Allowable By-Right Uses (PD-IP at 0.4 FAR)	Difference (Proposed Net vs. Approved)
1,400 Townhouses	4,187 AM Peak Hour;	15% Internal Reduction for Residential, Office and Retail;	3,591 AM Peak Hour;	3,911 AM Peak Hour;	-320 AM Peak Hour;
720 Hotel Rooms	5,443 PM Peak Hour;		4,425 PM Peak Hour;	3,896 PM Peak Hour	+529 PM Peak Hour;
1,700,000 sq ft Office Park	56,755 Weekday;	10% mode split reduction for Residential and Office	45,451 Weekday;	33,045 Weekday;	+12,406 Weekday;
300,000 sq ft Retail	4,473 Saturday Peak Hour		3,630 Saturday Peak Hour	439 Saturday Peak Hour	+3,191 Saturday Peak Hour
5,500 seat Baseball Stadium		25% Pass-by reduction for Retail			
120,000 sq. ft Performing Arts Center*		40% Pass-by reduction for Drive-Thru Bank			

*The Performing Arts Center will only generate off-peak hour trips

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Trip Generation Summary and Comparison-2025 (Build-Out Phase 3)

Proposed Development Program	Gross Trips Generated by Proposed Development Program	TDM Reductions Proposed in Traffic Study	Net Trips Generated by Proposed Development	Allowable By-Right Uses (PD-IP at 0.4 FAR)	Difference (Proposed Net vs. Approved)
1,400 Townhouses	6,771 AM Peak Hour;	15% Internal Reduction for Residential, Office and Retail;	5,898 AM Peak Hour;	4,804 AM Peak Hour;	+1094 AM Peak Hour;
720 Hotel Rooms	8,794 PM Peak Hour;		7,355 PM Peak Hour;	4,947 PM Peak Hour	+2,408 PM Peak Hour;
4,720,000 sq ft Office Park	86,721 Weekday;	10% mode split reduction for Residential and Office	71,520 Weekday;	42,090 Weekday;	+29,430 Weekday;
500,000 sq ft Retail	5,560 Saturday Peak Hour	25% Pass-by reduction for Retail	4,496 Saturday Peak Hour	560 Saturday Peak Hour	+3,936 Saturday Peak Hour
5,500 seat Baseball Stadium		40% Pass-by reduction for Drive-Thru Bank			
375,000 sq. ft Performing Arts Center*					

*The Performing Arts Center will only generate off-peak hour trips

Trip Distribution

The traffic study shows that trip distribution for this application was based on local and regional travel. At build out (Year 2025) weekday, the traffic study indicates that site traffic would access as follows (*See Attachment 9*):

- 35% would access Route 7 to/from west of Route 28
- 15% to/from the east on Route 7
- 15% to/from the south on Route 28
- 5% to/ from Farmwell Road west of Route 607 (Gloucester Parkway)
- 10% to/from Loudoun County Parkway south of Route 625
- 5% to/from Pacific Boulevard south of Route 625
- 5% to/from Nokes Boulevard east of Route 28
- 5% to/from Gloucester Parkway west of the Loudoun County Parkway
- 3% to/from Waxpool Road south of Route 640
- 2% to/from Route 625 east of Route 625.

Please note that more detail is needed as to the specific percentages of site traffic as it will enter and exit the site on the roads in the immediate vicinity of the site including Pacific Boulevard to the north and south, Gloucester Parkway to/from the east and west as well as the traffic percentages to/from Route 28 at Nokes Boulevard.

Existing and Forecasted Traffic Volumes and Level of Service from the Applicant's Traffic Study

The Applicant's revised traffic study analyzes the roadway improvements required to accommodate the existing 2008, future 2011, future 2015, future 2025 and future 2030 traffic conditions. The traffic study includes Level-of-Service (LOS) analysis at the existing and planned intersections during the AM and PM weekday peak hours and the Saturday peak hour for the existing (2008) conditions and each of the proposed development phase years (2011), (2015), (2025) and the build-out plus 5 year phase (2030). Recommendations for addressing problem intersections are also provided. These are included in *Attachments 10-14*.

Existing (2008) Review

The applicant's traffic study (*Attachment 10*) indicates unacceptable LOS (LOS E or F) under existing (2008) conditions at several intersections as follows:

- Route 7/Ashburn Village Boulevard/Janelia Farm
- Route 7/Lexington Drive/Smith Circle
- Route 7/Loudoun County Parkway
- Route 7/Richfield Way/George Washington Boulevard
- Route 7/City Center Boulevard/Countryside Boulevard
- Route 7/Loudoun Tech Drive/Palisade Parkway
- Algonkian Parkway/Winding Road/Sutherlin Lane
- Loudoun County Parkway/Gloucester Parkway
- Route 28/Steeple Chase Drive
- Farmwell Road/Ashburn Village Boulevard
- Farmwell Road/Waxpool Road/Smith Switch Road
- Waxpool Road/Loudoun County Parkway
- Waxpool Road/Pacific Boulevard
- Church Road/Davis Drive/Ruritan Circle

Please note that the intersections of Route 28/Nokes Boulevard and Route 28/Severn Way are not included in this list due to the recent completion of the Route 28/Nokes Boulevard interchange and closure of Severn Way at Route 28. Also, the analysis indicates that the majority of the existing intersections are operating at unacceptable LOS (LOS E or F) under the existing conditions of the year 2008. It is indicated that the connection of Pacific Boulevard to Russell Branch and Gloucester Parkway to Loudoun County Parkway will improve the levels of service significantly.

2011 Review

The traffic study addresses the LOS issues with improvement to several intersections in 2011, without the proposed development. These include interchanges, traffic signals and signal timing adjustments as follows:

- The planned interchanges at Route 7/Loudoun County Parkway, Route 7/Ashburn Village Boulevard and a possible interchange at Waxpool Road/Loudoun County Parkway will address the failing LOS at those intersections as well as at Route 7 with Richfield Way/George Washington Boulevard (which will be closed with the Route 7/Loudoun County Parkway interchange), and Route 7/Lexington Drive/Smith Circle West. Please note, however, that the closure of the Route 7/Lexington Drive/Smith Circle west signalized intersection will need more than simply adding the Route 7/Loudoun County Parkway and Route 7/Ashburn Village Boulevard interchanges. A parallel road network, including the proposed Riverside Parkway and possibly the Lexington Drive bridge over Route 7 would need to be in place for this intersection to be closed.
- The Route 28/Steeplechase Drive intersection was assumed to be completely removed by 2011 as part of the limited access plan for Route 28.
- Signal timing modifications are noted that are proposed to improve the Route 7/City Center Boulevard/Countryside Boulevard intersection to acceptable (D) LOS. However, please note that traffic information taken from the Dulles Town Center traffic study, dated October 1, 2008 by Wells & Associates, indicates that the LOS at this intersection is not able to be improved to an acceptable condition with the proposed Dulles Town Center development.
- The installation of traffic signals and signal timing/cycle length modifications are proposed to improve the following intersections: Route 7/Loudoun Tech Drive/Palisade Parkway, Algonkian Parkway/Winding Road/Sutherlin Lane, Loudoun County Parkway/Smith Switch Road, Nokes Boulevard/Atlantic Boulevard, Nokes/Cascades Parkway/Potomac View Road, Farmwell Road/Ashburn Village Boulevard, Farmwell Road/Waxpool Road/Smith Switch Road, Waxpool Road/Loudoun County Parkway prior to a possible interchange, Waxpool Road/Pacific Boulevard, Church Road/Davis Drive/Ruritan Circle, Church Road/Cascades Parkway and Loudoun County Parkway/Russell Branch Parkway.

With the assumed improvements listed above and proposed development traffic in 2011 (*Attachment 11*), the Farmwell Road/Ashburn Village Boulevard and Waxpool Road/Pacific Boulevard intersections would need signal timing and cycle length modifications to maintain acceptable LOS. In addition, the study indicates that two new intersections, Gloucester Parkway/Pacific Boulevard and Pacific Boulevard/Site Driveway #2 would need signalization.

2015 Review

In future conditions without the proposed development for 2015, the traffic study indicates that several intersections will operate below LOS D. The study also makes recommendations to address the inadequate LOS. These include:

- The Route 7/City Center Boulevard/Countryside Boulevard intersection will include a southbound approach with LOS E. Adjustments are recommended to the signal timing and cycle lengths.
- The Loudoun County Parkway/Gloucester Parkway intersection will operate at an overall LOS F. Adjustments are recommended to the signal timing and the addition of an eastbound left turn bay and northbound and southbound turn lanes.
- The Farmwell Road/Ashburn Village Boulevard intersection will operate at an overall LOS E including a LOS F for the westbound movement. Recommendations include provision of eastbound and westbound through lanes and eastbound, westbound and northbound left turn lanes.
- The Farmwell Road/Waxpool Road/Smith Switch Road intersection will include a southbound approach with LOS E. The study recommends adding a fourth eastbound and fourth westbound through lane plus adjusting the signal timings and cycle lengths.
- The Waxpool Road/Pacific Boulevard intersection would include a northbound approach with LOS E in the a.m. peak hour and LOS E for the westbound approach in the p.m. peak hour. The study recommends adjusting the peak hour signal timings.
- The Loudoun County Parkway/Russell Branch intersection operates at an overall LOS E in the p.m. peak hour which includes an LOS F for the eastbound approach. The study recommends adding two-left turn lanes, one through lane and one free flow right turn lane to the eastbound approach, making the westbound right turn lane free flow, adding a second southbound left turn lane and adjusting the signal timings and cycle lengths.

With the proposed development and the assumed improvements listed above in 2015, several intersections (*Attachment 12*) will still need mitigation. These are as follows:

- The Farmwell Road/Ashburn Village Boulevard intersection will need the signal timing to be adjusted.

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- The Waxpool Road/Pacific Boulevard intersection will need signal timing and cycle length adjustments, the addition of a third eastbound left turn lane and the conversion of the eastbound right turn lane to free flow.
- The Church Road/Davis Drive/Ruritan Circle intersection is recommended to have the split phasing removed and signal timing and cycle length adjusted.
- The Loudoun County Parkway/Russell Branch Parkway intersection is recommended to include signal timing and cycle length adjustments.
- The Gloucester Parkway/Pacific Boulevard intersection is recommended to include signalization, additional northbound and south bound through lanes, and a separate northbound right turn lane.
- The Pacific Boulevard intersections with Site entrance numbers 2 and 5-9 are recommended to include additional northbound and southbound through lanes.
- The Pacific Boulevard intersections, with Site entrance numbers 1, 3, and 4, include recommendations for signalization plus the addition of a second southbound through lane and northbound through and left turn lanes.
- The Pacific Boulevard intersection with Site entrance number 10 includes recommended signalization and the addition of northbound and southbound through lanes.

2025 Review

In future conditions without the proposed development for 2025, the traffic study indicates that several intersections will operate below LOS D. The study makes recommendations to address these intersections as follows:

- The Route 7/City Center Boulevard/Countryside Boulevard intersection is shown to include the southbound approach with LOS E in the p.m. peak hour. The study recommends changing the p.m. peak hour signal timings.
- The Nokes Boulevard/Cascades Parkway/Potomac View Road intersection is shown to include the northbound approach with an LOS E in the p.m. peak hour. The study recommends changing the p.m. peak hour signal timing.
- The Waxpool Road/Pacific Boulevard intersection is shown to operate at an overall LOS E in the a.m. peak hour and LOS F in the p.m. peak hour. The study recommends changing the signal timing and cycle lengths. It should be noted however that, while this is shown to improve the LOS to D in the a.m. peak hour, the LOS F condition remains in the p.m. peak hour at this intersection.

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With the proposed development and the assumed improvements listed above in 2025, several intersections (*Attachment 13*) will still need mitigation as follows:

- The Route 7/City Center Boulevard/Countryside Boulevard intersection will need p.m. signal time and cycle length adjustments to address an overall LOS E in the p.m. peak hour.
- The Loudoun County Parkway/Gloucester Parkway, shown to be at LOS F overall, will need signal timing and cycle length adjustments, the addition of dual lefts, two through lanes and a right turn lane in the westbound and southbound directions. A left turn lane and right turn lane are needed in the eastbound direction and a third through lane and right turn lane are needed in the northbound direction.
- The Farmwell Road/Ashburn Village Boulevard intersection, shown at LOS E in the p.m. peak hour overall with a westbound approach at LOS F, is shown to need signal timing and cycle length adjustments.
- The Waxpool Road/Pacific Boulevard intersection is shown to be failing in the a.m. and p.m. peak hours. Signal timing and cycle length adjustments are shown to help in the a.m. peak hour. However, the failing LOS in the p.m. peak hour remains.
- The Loudoun County Parkway/Russell Branch Parkway intersection is shown to be at LOS E in the a.m. and p.m. peak hours. It would need signal timing and cycle length modifications.
- The Gloucester Parkway/Pacific Boulevard intersection is shown at LOS F overall. It will need three through lanes, dual lefts and a right turn lane eastbound, a free flow right turn lane westbound, dual left turn lanes and right turn lane southbound and a left turn lane northbound.

It is important to note that the traffic study also recommends that with the proposed development, the Route 7, Route 28 and Waxpool Road corridors be widened to eight lanes in the vicinity of the site in addition to having grade separated interchanges.

2030 Review

In future conditions with the proposed development for 2030, the traffic study indicates that several intersections (*Attachment 14*) will operate below LOS D as follows:

- The westbound leg of the Farmwell Road/Ashburn Village Boulevard intersection would operate at LOS E during the p.m. peak hour.

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- The Waxpool Road/Pacific Boulevard intersection will operate at LOS E in the a.m. peak hour and LOS F in the p.m. peak hour.
- The eastbound leg of the Church Road/Davis Drive/Ruritan Circle intersection will operate at LOS E in the p.m. peak hour.
- The Church Road/Potomac View Road intersection will operate at LOS E in the p.m. peak hour.
- The eastbound leg of the Pacific Boulevard intersections with Site driveway numbers 5 and 6 will operate at LOS F in the p.m. peak hour.

Please note that the applicant is required to mitigate traffic congestion (below LOS D) for each phase of development up to and including the build out year which is 2025. However, post development scenarios including this 2030 data are helpful in anticipating future traffic issues.

Transportation Issues

Discussed below are two sets of comments. The first set of comments relates to how the applicant has addressed the original OTS comments from the April 27, 2009 memo (*Attachment 1*) as discussed below in comments 1 through 13. These include the original OTS comment, the applicant's response, and whether the issue has been adequately addressed which are shown in bold print. In addition, new comments are provided regarding recommendations for the transportation system relative to the proposed application including comments related to the draft proffers from the applicant.

1. **Initial Staff Comment (First Referral April 27, 2009):** The applicant has provided a traffic study in support of the rezoning application that seems to combine trip generation resulting from both the rezoning land uses as well as the special exception uses. OTS notes that approval of the special exception, a separate application is not guaranteed and therefore the trip generation presented thus represents a worst-case scenario. Has OTS interpreted this assumption correctly? Also, there appears to be a discrepancy between this study and the special exception only traffic study with respect to the magnitude of proposed uses (office park) for the special exception. Please clarify.

Applicant's Response (June 10, 2009): *The trip generation presented in the study does present a worst- case scenario. A meeting was held with Loudoun County and VDOT staff on April 9, 2009 to address the comments and questions raised by OTS staff regarding the special exception application. The revised impact study dated April 27, 2009 shows a separate analysis for the Rezoning application and for the Special Exception application. Although the proposed Rezoning application incorporates the Special Exception uses, in order to differentiate between the two applications, the analysis for the two applications has been conducted separately.*

Issue Status: The study accurately reflects the approved uses, including the office park, for the Special Exception. The Rezoning application does incorporate the Special Exception uses and since the Special Exception was approved (See Attachment 3), this issue has been adequately addressed. However, the revised traffic study doesn't clearly show the trip generation broken out between the approved Kincora Special Exception (SPEX-2008-0054) and the proposed Kincora rezoning (ZMAP 2008-0021) a separate table is recommended to clearly show the trip generation for each. This can be in the form of an addendum to the April 27, 2009 study.

2. **Initial Staff Comment (First Referral April 27, 2009):** The applicant has made numerous assumptions regarding recommended/anticipated improvements to be in place in the various phases of the project. OTS believes that many of these assumptions are unrealistic given OTS' understanding of funding levels and proffered/planned improvements. OTS requests a meeting with the applicant's traffic consultant to discuss the matter before providing further comment on the analysis results.

Applicant's Response (June 10, 2009): *A meeting was held on May 27, 2009 with OTS staff to discuss the comments received on the rezoning application. Based on the discussion held at the meeting, there was some confusion regarding the planned roadway/transportation improvements stated in the report, which were based on the Countywide Transportation Plan. However, the analysis presented in the report did not take into account all of the planned improvements. The improvements necessary to improve or achieve the acceptable levels-of-service were the only ones included in the analysis. However, per the County staff's request, a supplemental analysis was requested without assuming planned roadway improvements as shown on the CTP for Route 28, Route 7 and Waxpool Road. Hence, intersections along Route 28, Route 7 and Waxpool Road were reanalyzed without assuming the planned improvements in place for the existing conditions. For the future conditions analysis, however, the planned interchanges were assumed to be in place, which was agreed to at the meeting. The supplemental analysis presented along with this memo shows the details of the capacity analysis results.*

Issue Status: This is understood and confirmed by OTS. However, OTS continues to believe that some of the assumed future conditions, including the assumed 8 lanes on Route 7, Route 28 and Waxpool Road improvements in the future scenarios are optimistic in that they are not currently funded. OTS recommends that the applicant participate in these improvements. This will be addressed in subsequent comments.

3. **Initial Staff Comment (First Referral April 27, 2009):** The applicant has provided trip generation figures for each phase of the project as part of the traffic study. In each case, the study indicates that the figures represent new trips generated by the proposed development program for that point in time. OTS

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believes that the trip generation shown for each phase is actually cumulative (i.e. phase II = phase I + phase II). Is this correct? Please clarify.

Applicant's Response (June 10, 2009): *That is correct. The trip generation for Phase II is cumulative of Phase I and II and the trip generation for Phase III is cumulative of Phase I, II and III.*

Issues Status: **In the review of the applicant's revised traffic study, OTS staff has confirmed this. The issue has been adequately addressed.**

4. **Initial Staff Comment (First Referral April 27, 2009):** The interchange of Route 28/Nokes Boulevard is under construction to be a full cloverleaf interchange. The interchange of Route 28/Nokes Blvd will open in phases beginning May 2009 with full operation expected in September 2009. If not provided through the applicant's special exception application, the applicant should dedicate adequate right-of-way at no cost for the purpose of construction of the interchange and a section of Gloucester Parkway that is also being constructed from Route 28 to Pacific Boulevard as a part of the Route 28/Nokes Boulevard interchange project.

Applicant's Response (June 10, 2009): *The right-of-way for the interchange has already been acquired by VDOT and the applicant no longer owns the area for this right-of-way, and that area is not included in the SPEX area.*

Issues Status: The Kincora Special Exception has already been approved. However, there is a pending court case between the applicant and VDOT regarding the value of the property acquired by VDOT for the interchange. OTS staff notes that the interchange construction is now complete. Issue adequately addressed.

5. **Initial Staff Comment (First Referral April 27, 2009):** The traffic study assumes a 10% reduction for transit service. The applicant will be responsible for providing transit facilities equal to the 10% anticipated traffic reduction; in other words, the applicant should show how the traffic impact would be reduced on the adjacent roads. In terms of transit, what mitigation measures will this applicant provide to ensure the 10% reduction in trips in the vicinity of the site? Please describe.

Applicant's Response (June 10, 2009): *An interim Travel Demand Management program (TDM) will be implemented to reduce the number of vehicle trips. This includes the use of mass transit, ride-sharing and/or other strategies. A 10% TDM reduction on proposed office, hotel and residential trips. Of note, no TDM reduction was applied to the retail trips or baseball stadium. The TDM reduction was also applied to the net trips (excluding external trips). The US census data for the Broad Run District and adjacent districts was used to compile the percentage breakdown. The details of the Census data are presented in the*

Appendix section. The components of the TDM program, which include Carpooling/Vanpool/Ridesharing, Telework, Shuttle Bus Connections and Flex Work Schedule was assumed to reduce the proposed site traffic by 571 a.m. peak hour, 591 p.m. peak hour, and 152 Saturday peak hour vehicle trips.

Issues Status: OTS requests that the applicant clarify how these reductions have been coordinated with Table 13: Trip Generation (Phase III- 2025) on pages 133-134 of the applicant's revised study. In addition, the applicant's

proposed draft proffers (pages 25-28) relating to transit contributions and TDM program, including their perceived effectiveness in reducing single-occupant vehicle trips, will need review and comment by the OTS staff. As of this writing, a decision has not been made as to the validity of the proposed 10% TDM reduction by the applicant. Further review and discussion is needed.

6. **Initial Staff Comment (First Referral April 27, 2009):** The applicant has included trip reductions for internal capture. Please provide appropriate justification/documentation for these reductions. The internal capture reductions should be confirmed with VDOT.

Applicant Response (June 10, 2009): The 5% internal capture reduction was agreed and accepted by VDOT and County staff at the scoping meeting. The Chapter 527 guidelines also stipulate a 15% internal capture reduction for residential with a mix of non-residential components.

Issues Status: The question is, why 15% was applied to other non-residential uses on Table 13, pages 133-134, of the revised traffic study? The Chapter guidelines recommend using the smaller of 15% of residential or non-residential trips generated. Please clarify.

7. **Initial Staff Comment (First Referral April 27, 2009):** The traffic impact study assumes 25% - 40% as pass-by trip reductions for the proposed development in 2015. No pass-by trip reduction should be proposed for trips on Pacific Boulevard as long as Pacific Boulevard is not connected to Russell Branch. Even if a trip reduction were allowed on Pacific Boulevard, it would not apply to ingress or egress volumes at the site entrances. The assumption of pass-by reduction should be confirmed with VDOT. In a meeting with the applicant dated April 4, 2009, the applicant indicated that the 25% pass-by trip reduction was eliminated during the Phase 1 for the SPEX. The applicant may need to clarify that in the addendum taking in consideration that 25% pass-by reduction is a high reduction number even after the connection of Pacific Boulevard.

Applicant's Response (June 10, 2009): The 25% pass by reduction was agreed to and accepted by VDOT and County staff at the scoping meeting. The Chapter 527 guidelines also stipulate a 25% pass by reduction for retail uses. Although

without the Pacific Boulevard connection to Russell Branch Parkway there will be no regional or existing traffic along the proposed section of Pacific Boulevard, the pass-by trips will be more of 'diverted trips' from Route 28. Hence, no trip reduction was applied to ingress or egress volumes at the site entrances. The total site traffic entering and leaving the entrances includes the pass-by trips.

Issues Summary: OTS requests that the applicant clarify why the 25% pass-by reduction is shown in trip generation Table 3, for Phase 1 (year 2011) on pages 43-44 of the applicant's traffic study. Also, the proposed 40% pass-by reduction for drive-thru banks exceeds the 25% allowed under Chapter 527 and has not been documented. Please clarify.

8. **Initial Staff Comment (First Referral April 27, 2009):** Given the size of the proposed development, a significant contribution towards regional transit facilities is anticipated. Further discussion with the applicant with respect to the nature of the contribution is necessary.

Applicant's Response (June 10, 2009): *Comment acknowledged. A meeting has been scheduled with County transit staff.*

Issues Status: This meeting has already occurred and OTS staff has set forth a series of recommendations which are outlined in comment #19.

9. **Initial Staff Comment (First Referral April 27, 2009):** The Loudoun County Bicycle and Pedestrian Mobility Master Plan adopted October 20, 2003 and the CTP adopted on July 23, 2001 include policies for Pedestrian and Bicycle Facilities. The Loudoun County Bike and Pedestrian Mobility Master Plan calls for the construction of a multi-purpose trail along Pacific Blvd and Gloucester Parkway. The applicant should construct these trails and may be required to dedicate additional ROW in order to do so. In order for VDOT to maintain a trail, the trail must be built within the public right-of-way; otherwise, it is the responsibility of the applicant to maintain the trail. To ensure the safety of bicyclists and motorists all bicycle facilities must be designed according to AASHTO standards. These standards are documented in A Guide for the Development of Bicycle Facilities, AASHTO, 1999, and may be obtained through AASHTO's website www.aashto.org. Per these standards, multi-use trails should be constructed with a 10-foot paved travel-way with 2-foot graded shoulders on both sides of the trail.

Applicant's Response (June 10, 2009): *Comment acknowledged.*

Issues Status: The applicant has provided for trails in the draft proffer statement. Please clarify that the proposed trails are to be within the public (VDOT) right-of-way. In addition, these trails need to connect with existing trails or be set up to connect with planned future trails. Please clarify.

**ZMAP 2008-0021-Kincora Village Center, OTS Second Referral Comments,
September 4, 2009**

10. **Initial Staff Comment (First Referral April 27, 2009):** The applicant should provide a link level of service and queuing analysis for the proposed typical sections along the frontage of Pacific Boulevard.

Applicant's Response (June 10, 2009): *Comment acknowledged. The results of the queuing analysis and link LOS analysis for the proposed typical sections along the frontage of Pacific Boulevard for the years 2011, 2015 and 2025 are presented in Tables 1-6 in the response memo. The results are expressed in terms of 50th percentile and 95th percentile queue length (feet).*

Issues Status: The issue has been adequately addressed.

11. **Initial Staff Comment (First Referral April 27, 2009):** The site plan shows that most of the internal roads are private roads; therefore, they should comply with the Loudoun County Facility Standards Manual. The public roads should be compatible with VDOT standards.

Applicant's Response (June 10, 2009): *Comment acknowledged.*

Issue Status: The applicant has noted this in the in the draft proffers. This issue has been adequately addressed.

12. **Initial Staff Comment (First Referral April 27, 2009):** The applicant should construct sidewalks on both sides of the internal roads. The Owner's Association (OA) will maintain all sidewalks and trails, other than those located on public ROW.

Applicant's Response (June 10, 2009): *Comment acknowledged. Please refer to the revised Special Exception plat.*

Issues Status: It is unclear, however, how this is being handled with this rezoning. The draft proffers discuss the HOA responsibilities under the VII. Owners Association paragraph on pages 33-34 which appear to cover private trails and sidewalks. Please clarify.

13. **Initial Staff Comment (First Referral April 27, 2009):** OTS will provide a review of the draft proffers once we have had a chance to evaluate the revised traffic analysis.

Applicant's Response (June 10, 2009): *Comment acknowledged.*

Issue Status: OTS Staff has reviewed the submitted draft proffers (dated July 23, 2009) and comments are incorporated below.

New Transportation Comments

14. The applicant's traffic study includes an extensive review of the surrounding road network. It outlines a number of intersections which are operating below LOS D and includes recommendations for improvement in conjunction with each development phase. The issue is, however, that the applicant's draft proffers do not address transportation improvements to the various off-site intersections. The applicant needs to provide these improvements to the various intersections as laid out in the study. The study has specific recommendations (Attachment 15), as well as with each phase, which need to be addressed in the proffers. For example, the study recommends that the Waxpool Road/Pacific Boulevard intersection include signal timing/cycle length adjustments, the addition of additional northbound and southbound left-turn bays and the addition of a 4th eastbound through lane. Yet the draft proffers are silent as to funding or construction of these needed improvements. The applicant needs to develop a phasing plan with specific improvements that address failing intersections and road widening in the general vicinity of the site. In addition, the phasing thresholds in the draft proffers don't match with the phasing in the traffic study. The specific traffic impacts of the phased development in the proposed draft proffers need to be clarified.
15. The applicant's traffic study notes, on page xi, that Route 7 and Route 28 will require widening to 8 lanes in the vicinity of the site. In addition, the study also notes that Waxpool Road and Loudoun County Parkway will require major lane improvements. Please note that there are no public funds to provide these needed future widenings. The applicant's draft transportation proffers do not address these improvements even though the proposed development, even when allowing for all of the proposed reductions as well as the approved portion of Kincora under SPEX 2008-0054, the proposed development will generate approximately 5,200 a.m. peak hour, 6,600 p.m. peak hour and 62,000 daily vehicle trips. The proposed development will heavily impact the proposed road network. The applicant needs to make significant contributions and construction to the surrounding road network including Route 7, Route 28, Waxpool Road and Loudoun County Parkway to offset the site generated traffic impacts. This would also include widening the two-lane segment of Pacific Boulevard between Nokes Boulevard and Severn Way and the two-lane segment of Loudoun County Parkway in the vicinity of the Redskins Park Drive and Gloucester Parkway.
16. In the event the Board of Supervisors does not create a community development authority (CDA), the applicant proposes to provide transportation improvements in accordance with phased development in the draft proffers. The applicant's transportation proffers focus primarily on the internal development of Pacific Boulevard, the extension of Pacific Boulevard north to connect with Russell Branch Parkway and the extension of Gloucester Parkway west from the site to Loudoun County Parkway. The connection of Pacific Boulevard north to Russell Branch Parkway is proposed to come relatively late in the proposed development phasing. The applicant's draft proffers, in III Transportation D 5 on page 21,

**ZMAP 2008-0021-Kincora Village Center, OTS Second Referral Comments,
September 4, 2009**

indicate that Pacific Boulevard will not be connected off-site to the north to Russell Branch Parkway until zoning permits are issued for 1,700,001 square feet of non-residential uses, the 501st hotel room or the 1,069th residential unit. This means that up to 1,700,000 square feet of non-residential, 500 hotel rooms and 1,068 residential units could be constructed on-site without any connection of Pacific Boulevard to the north or Gloucester Parkway to the west. Assuming the townhouse/condo, hotel and office park (and not the higher retail) trip rates for the above land use totals from the applicant's traffic study, this level of proposed development would generate over 31,000 daily vehicle trips and continue to rely on the existing Route 28/Nokes Boulevard interchange as well as the failing Waxpool Road/Pacific Boulevard intersection to the south and other failing intersections in the vicinity. This is not acceptable. It is recommended that the applicant connect Pacific Boulevard north to Russell Branch Parkway with access west to Loudoun County Parkway much earlier in the development process. This is because many of the intersections adjacent to the site are shown in the traffic study to operate at inadequate levels-of-service currently and in the future. It is recommended that the applicant tie the off-site extension of Pacific Boulevard to an earlier development threshold. For example, the Waxpool Road/Pacific Boulevard and Waxpool Road/Loudoun County Parkway intersections are failing now and any additional site traffic will simply exacerbate the delays. At the same time, OTS recognizes that the cost of constructing this improvement will require a certain development threshold. However, OTS recommends a significantly lower maximum development threshold prior to the completion of the Pacific Boulevard connection to Russell Branch Parkway. Further discussion is needed.

17. Similar to Comment 16 above, in the absence of a CDA, the applicant includes phasing in the draft proffers for the proposed connection of Gloucester Parkway from Route 28 to Loudoun County Parkway. It is recommended that this connection occur much earlier in the development phasing than proposed by the applicant. The applicant's draft proffers call for the extension of Gloucester Parkway prior to the issuance of 2,400,001 square feet of non-residential uses. Assuming this proposed development is 100% office park and not the higher retail traffic generators, this would add over 7,700 daily vehicle trips over and above the traffic (approximately 31,000 daily vehicle trips) noted in comment 16. It is recommended that this improvement be in place prior to the completion of the Phase I (year 2011) development. At the same time, OTS recognizes that the cost of constructing Gloucester Parkway between Route 28 and the Loudoun County Parkway will require a certain development threshold. However, OTS recommends a significantly lower maximum development threshold prior to the completion of the Gloucester Parkway to Loudoun County Parkway. Further discussion is needed.
18. The applicant's traffic study recommends that the Waxpool Road/Loudoun County Parkway intersection will need to be converted into a grade separated interchange. The applicant's traffic study indicates that over 25% of the site traffic would traverse through this intersection. Therefore, the applicant's draft

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September 4, 2009**

proffers need to address amelioration including a significant contribution including an interchange study. Please note that this interchange is not included in the current CTP. This potential improvement needs to be discussed as part of the ongoing CTP update for possible inclusion.

19. Transit-related recommendations for this application, including a per unit transit contribution, have been discussed with the OTS transit manager. These include:

- Removal of the proposed temporary community parking lot described under draft proffer I. under III Transportation on page 25.
- Provision of \$575 per dwelling unit for use in providing transit and please insure that the applicant's proposed TDM program is identical to that approved under the Kincora Village Office/Recreational Complex under SPEX 2008-0054.
- Insure that the proposed bus shelters included under draft proffer J. under III Transportation on page 25 are in addition to the approved shelters under the Kincora Village Office/Recreational Complex under SPEX 2008-0054. Also, there needs to be language included in which the applicant will design and locate the proposed bus shelters with approval from the Loudoun County OTS staff.
- Under draft proffer L. Employee /Shuttle, it is recommended that this be a general service to serve the site with adequate (20 minutes recommended) headways and not limited to employees only. This would include changing the name to the Kincora Shuttle. Also, the draft proffer for this needs to be revised such that the 1,500,000 square feet threshold would include the square footage already approved under the Kincora Village/Office/Recreational Complex approved under SPEX 2008-0054. This service needs to be privately funded and operated. The phrase in the last sentence of draft proffer I "...provided there are uses located in Land Bays L, N, and Q that generate ridership demand deemed sufficient for such shuttle service." needs to be deleted as it would limit service.
- Finally, the proffers need to note that the specifications of this service will need review and approval from OTS.

20. In the applicant's draft proffers under III Transportation F. Traffic Signalization on page 24, the proposed \$160,000 set forth as a cash equivalent for signals is inadequate and is recommended to be \$300,000 in keeping with current cost estimates for the design and construction of a traffic signal. Please note that the conditions approved for the Kincora Village Special Exception (SPEX 2008-

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0054) condition the applicant to fund all signalization costs without a dollar cap. Also, it is unclear as to the number and location of these signals in the proffers. Please clarify.

21. In the applicant's draft proffers, under III. Transportation C. Construction of Public Roads With A Community Development Authority (CDA) on pages 16-17, input from the County Attorney's Office is recommended. This is a road funding mechanism proposed by the applicant as an option to construct public roads.
22. The proposed trip distribution percentages need to be better clarified in the immediate vicinity of the site for each of the proposed phases. This will help to clarify the impacts of site traffic in the immediate vicinity of the roads.
23. The proposed signal timing modifications proposed in the study for the Route 7/City Center Boulevard need to be reviewed in light of the Wells Study for the Dulles Town Center application dated October 1, 2008, and subsequent study dated June 18, 2009, with VDOT. Further discussion is recommended.

Conclusion

Further discussions are recommended with the applicant, the applicant's traffic consultant and OTS transit manager. OTS does not have a recommendation at this time.

Attachments

1. Initial OTS Comments
2. Vicinity Map
3. CDA information
4. SPEX 2008-0054 with conditions
5. LOS Policies
6. Trip Generation 2011
7. Trip Generation 2015
8. Trip Generation 2025
9. Trip Distribution
10. 2008 LOS
11. 2011 LOS
12. 2015 LOS
13. 2025 LOS
14. 2030 LOS
15. Study Conclusions and Recommendations

cc: Terrie Laycock, Director, OTS
Andrew Beacher, Assistant Director, OTS
Nancy Gourley, Transit Division Manager, OTS
Lou Mosurak, Senior Coordinator, OTS

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**ZMAP 2008-0021-Kincora Village Center, OTS Second Referral Comments,
September 4, 2009**

County of Loudoun
Office of Transportation Services
MEMORANDUM

DATE: April 27, 2009
TO: Judi Birkitt, Project Manager, Planning Department
FROM: Shaheer Assad, Senior Transportation Engineer/Planner
SUBJECT: ZMAP 2008-0021, Kincora Village Center
First Referral

Background

The applicant, NA Dulles Real Estate Investor LLC is seeking to construct 1,400 multi-family residential units; 4,000,000 square feet of office use, 720 hotel rooms including hotel/conference center uses; 500,000 square feet of support retail and a performing arts center. The proposed development will be constructed in the southwest and northwest quadrants of the Nokes Boulevard and Sully Road (Route 28) interchange. Approximately 24% of the proposed total site will be built in the first phase (2011), 18% will be developed in the second phase (2015) and 58% by the full build-out year (2025). Please see Attachment 1, Project Vicinity Map. The site is currently zoned for PD-IP industrial park (under the 1972 Zoning Ordinance) and FOD (Floodplain Overlay District). Access to the proposed site will be provided along the future Pacific Boulevard, the Nokes Boulevard/Route 28 interchange, and from Gloucester Parkway. Please see attachment 1.

The applicant has also submitted a special exception application to permit a recreational facility (baseball stadium), office, and auxiliary uses on 60.27 acres on the Kincora property which is currently under review. The total development for the first phase is approximately 1,160,000 square feet of commercial uses.

OTS reviewed materials received from the Department of Planning, dated November 7, including a traffic impact study prepared by Grove/Slade Associates, dated October 23, 2008; a rezoning plan set prepared by Urban Engineering dated October 2008; a draft of Proffers dated February 5, 2009; and a statement of justification dated October 31, 2008.

Based on the County's request, the traffic study analyzed the roadway improvements required to accommodate the existing 2008, future 2011, future 2015, future 2025 and future 2030 traffic conditions.

Finally, the applicant has submitted a request asking the Board of Supervisors (BOS) to create a Community Development Authority (CDA). If the BOS approves the CDA, the owner shall dedicate a right-of-way to the County or VDOT for the ultimate conditions of road improvements (including segments of Gloucester Parkway and Pacific Boulevard/Russell Branch Parkway) with the funding to be provided by the CDA. The transportation improvements would be implemented within 3 years of the date the CDA is created by the BOS. Without the CDA improvements would be phased in over the build out of the project.

Existing, Planned, and Programmed Roads

There are currently no public roads directly serving the site and no public funds or private sector proffers dedicated to expanding Pacific Boulevard to its ultimate four lanes at the vicinity of the site. The interchange of Nokes Boulevard/Route 28 will open in phases beginning May 2009 with full operation expected in Sept. 2009. The traffic study includes 23 intersections located in the vicinity of the proposed site. The following main roads are either existing or are planned facilities serving the subject site:

Route 7: The existing condition of Route 7 in the vicinity of this site is a six-lane/200 foot Right of Way (ROW), median divided, principal arterial with controlled access. Left and right turn lanes are required at all intersections. Design speed and median crossover spacing are variable. The Countywide Transportation Plan (CTP) states that bicycle/pedestrian facilities must be considered in the road's design and may require additional ROW. The traffic impact study indicates that Route 7 will be required to be widened to eight lanes and have grade separated interchanges in order to handle 2025 forecasted traffic.

Route 28: Route 28 (Sully Road) is a principal arterial, six-lane, median-divided, controlled access road with grade-separated interchanges that have been constructed at Route 625, Route 606, and Sterling Boulevard. In the vicinity of the site, the interchange of Nokes Boulevard and Route 28 is under construction and is scheduled for completion in Sept. 2009. Ultimately Route 28, as shown on the Countywide Transportation Plan (CTP), is planned to be an 8-lane, limited access freeway.

Pacific Boulevard: In the CTP, Pacific Boulevard in this vicinity is planned to be a 4-lane, undivided road in a 70-foot right-of-way and would traverse the eastern edge of the site. This portion of Pacific Boulevard is yet to be constructed. The CTP states that bicycle/pedestrian facilities must be considered in the design and may require additional ROW.

Gloucester Parkway: Gloucester Parkway section is also planned to traverse the site, extending west from Nokes Boulevard. This portion of Gloucester Parkway is also yet to be constructed. The functional classification for Gloucester Parkway is a Major Collector. The ultimate condition for Gloucester Parkway is a U6M, controlled access, median-divided, urban collector with a grade-separated interchange at Route 28. Left- and right-turn lanes are required at all intersections. A forty-five (45) mph design speed and desirable median crossover spacing of 800 feet are also required. The six-lane road requires a 120-foot ROW, plus land dedication for turn lanes at intersections. Bicycle/pedestrian facilities must be considered in the design and may require additional ROW.

Loudoun County Parkway: Loudoun County Parkway has been completed between Route 7 and Route 625. It is a 4-lane, median divided, controlled access, minor arterial with left and right turn lanes at all intersections. The ultimate CTP plan for Loudoun County Parkway is a U6M section in a 120-foot right-of-way. The CTP states that bicycle/pedestrian facilities must be considered in the design and may require additional ROW.

Waxpool Road: The site is located north of Waxpool Road (Route 625), currently a 4-lane, median divided, major collector road. The CTP calls for the ultimate condition for this segment of Route 625 to be a limited access, median-divided, 6-lane road with a minimum 120-foot right-of-way, plus land dedication required for left and right turn lanes. The design speed is 45 mph and the desirable median crossover is 700 feet.

Existing and Forecasted Traffic Volumes and Level of Service

The traffic study includes information related to capacity analysis that was performed at the intersections within the study area. The traffic study includes evaluation measures for the existing conditions of the year 2008. Analyses were performed at intersections and roadway capacity during the peak hours on the weekday as well as Saturday. The analysis indicates that most of these intersections would operate at unacceptable levels of service under the existing conditions of the year 2008. It is indicated that the connection of Pacific Boulevard to Russell Branch and Gloucester Parkway to Loudoun County Parkway will improve the levels of service significantly.

The traffic study recommends that Route 7 and Route 28 corridors be widened to eight lanes in addition to having grade-separated interchanges on these corridors within the vicinity of the site. The recommendation appears to be inconsistent with the current CTP, since Route 7 is on the plan as a 6-lane roadway. For example, it will be very difficult to assume that Route 7 will become eight lanes and in fact, the right-of-way will not be available on certain segments of Route 7. The traffic study assumes transportation improvements for nearby proposed sites for the background 2011 traffic conditions. However, the traffic study did not include who will do these improvements.

The traffic study shows the site trip generation calculation for years 2011, 2015, 2025 of the proposed plan using the Institute of Transportation Engineers (ITE), Trip Generation, 7th Edition. Please see the attachment numbers 5, 6, and 7 respectively. Trip generation reductions were considered for the internal trips, the pass by trips, and the mode split reduction. The attached tables show the difference between the currently designated development trips in the County's Revised General Plan and the proposed development program. At the full build-out in the year 2025, the site will generate approximately 5,898 vehicle trips during the AM peak hour, 7,355 vehicle trips during the PM peak hour, and approximately 71,520 average daily trips. Attachment 6 shows a trip comparison between the approved use and the proposed site trip generation (phase III-2025). Trips would increase by 23% during the AM peak hour, increase by 49% during the PM peak hour and increase by 70% for the average daily trips.

The level of service analysis was performed at the existing and planned intersections during the AM and PM peak for all the phases (2011), (2015), (2025) and build-out plus 5 years (2030).

The traffic study shows that trip distribution for this application was based on local and regional travel. It is indicated that 50% will use Route 7, 15% of the site's traffic will use Route 28, 10% will use Loudoun County Parkway to come to the site and 25% will use other collector Roads.

Transportation Comments and Recommendations

1. The applicant has provided a traffic study in support of the rezoning application that seems to combine trip generation resulting from both the rezoning land uses as well as the special exception uses. OTS notes that approval of the special exception, a separate application is not guaranteed and therefore the trip generation presented thus represents a worst-case scenario. Has OTS interpreted this assumption correctly? Also, there appears to be a discrepancy between this study and the special exception only traffic study with respect to the magnitude of proposed uses (office park) for the special exception. Please clarify.
2. The applicant has made numerous assumptions regarding recommended/anticipated improvements to be in place in the various phases of the project. OTS believes that many of these assumptions are unrealistic given OTS' understanding of funding levels and proffered/planned improvements. OTS requests a meeting with the applicant's traffic consultant to discuss the matter before providing further comment on the analysis results.

3. The applicant has provided trip generation figures for each phase of the project as part of the traffic study. In each case, the study indicates that the figures represent new trips generated by the proposed development program for that point in time. OTS believes that the trip generation shown for each phase is actually cumulative (i.e. phase II = phase I + phase II). Is this correct? Please clarify.
4. The interchange of Route 28/Nokes Boulevard is under construction to be a full cloverleaf interchange. The interchange of Route 28/Nokes Blvd will open in phases beginning May 2009 with full operation expected in September 2009. If not provided through the applicant's special exception application, the applicant should dedicate adequate right-of-way at no cost for the purpose of construction of the interchange and a section of Gloucester Parkway that is also being constructed from Route 28 to Pacific Boulevard as a part of the Route 28/Nokes Boulevard interchange project.
5. The traffic study assumes a 10% reduction for transit service. The applicant will be responsible for providing transit facilities equal to the 10% anticipated traffic reduction; in other words, the applicant should show how the traffic impact would be reduced on the adjacent roads. In terms of transit, what mitigation measures will this applicant provide to ensure the 10% reduction in trips in the vicinity of the site? Please describe.
6. The applicant has included trip reductions for internal capture. Please provide appropriate justification/documentation for these reductions. The internal capture reductions should be confirmed with VDOT.
7. The traffic impact study assumes 25% - 40% as pass-by trip reductions for the proposed development in 2015. No pass-by trip reduction should be proposed for trips on Pacific Boulevard as long as Pacific Boulevard is not connected to Russell Branch. Even if a trip reduction were allowed on Pacific Boulevard, it would not apply to ingress or egress volumes at the site entrances. The assumption of pass-by reduction should be confirmed with VDOT. In a meeting with the applicant dated April 4, 2009, the applicant indicated that the 25% pass-by trip reduction was eliminated during the Phase 1 for the SPEX. The applicant may need to clarify that in the addendum taking in consideration that 25% pass-by reduction is a high reduction number even after the connection of Pacific Boulevard.
8. Given the size of the proposed development, a significant contribution towards regional transit facilities is anticipated. Further discussion with the applicant with respect to the nature of the contribution is necessary.

9. The Loudoun County Bicycle and Pedestrian Mobility Master Plan adopted October 20, 2003 and the CTP adopted on July 23, 2001 include policies for Pedestrian and Bicycle Facilities. The Loudoun County Bike and Pedestrian Mobility Master Plan calls for the construction of a multi-purpose trail along Pacific Blvd and Gloucester Parkway. The applicant should construct these trails and may be required to dedicate additional ROW in order to do so. In order for VDOT to maintain a trail, the trail must be built within the public right-of-way; otherwise, it is the responsibility of the applicant to maintain the trail. To ensure the safety of bicyclists and motorists all bicycle facilities must be designed according to AASHTO standards. These standards are documented in A Guide for the Development of Bicycle Facilities, AASHTO, 1999, and may be obtained through AASHTO's website www.aashto.org. Per these standards, multi-use trails should be constructed with a 10-foot paved travel-way with 2-foot graded shoulders on both sides of the trail.
10. The applicant should provide a link level of service and queuing analysis for the proposed typical sections along the frontage of Pacific Boulevard.
11. The site plan shows that most of the internal roads are private roads; therefore, they should comply with the Loudoun County Facility Manual. The public roads should be compatible with VDOT standards.
12. The applicant should construct sidewalks on both sides of the internal roads. The Owner's Association (OA) will maintain all sidewalks and trails, other than those located on public ROW.
13. OTS will provide a review of the draft proffers once we have had a chance to evaluate the revised traffic analysis.

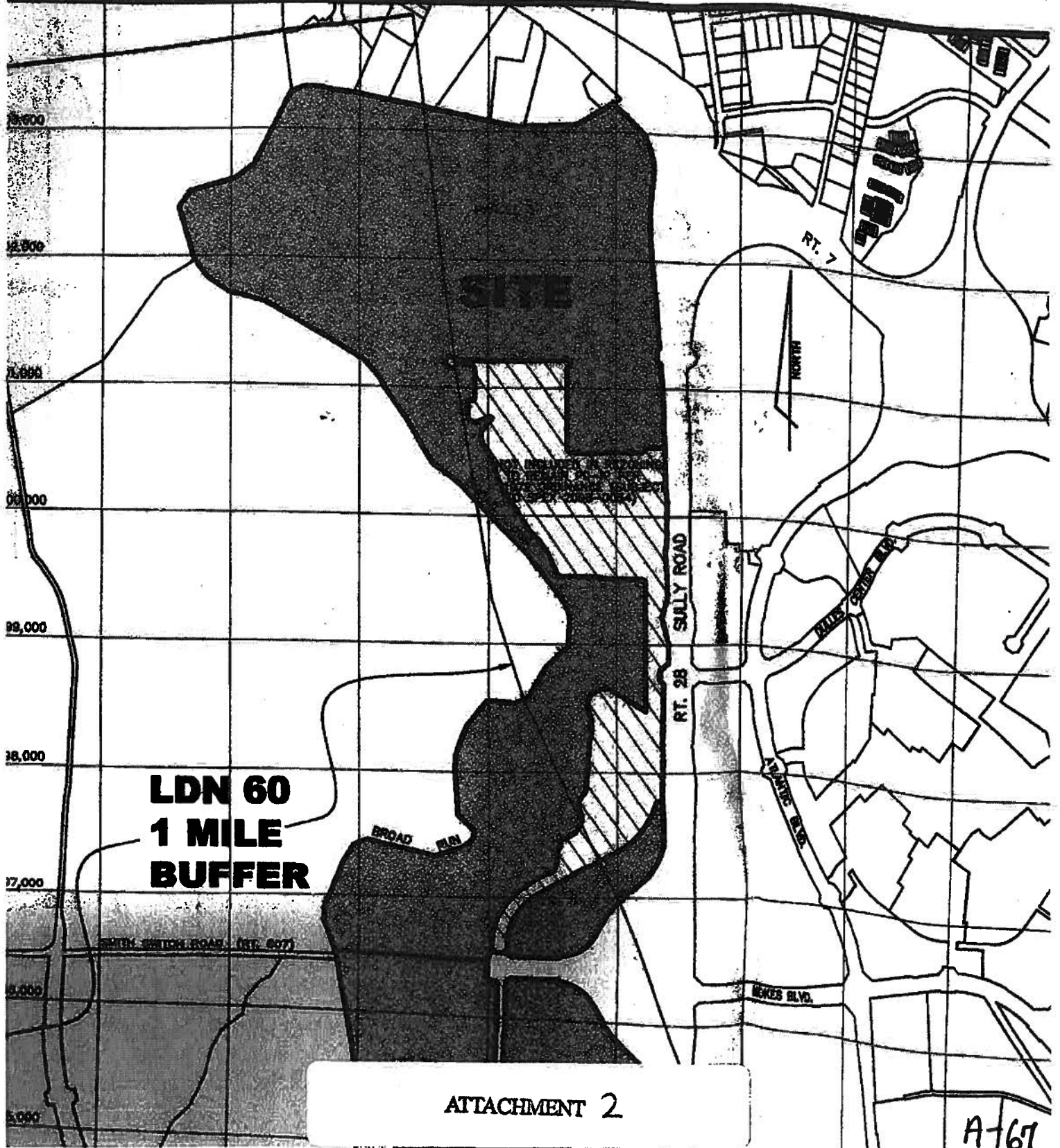
Conclusion

Further discussion with the applicant's traffic consultant is required. OTS will have additional comments upon receipt of the applicant's revised traffic study.

cc: Terrie Laycock, Director, OTS
Andrew Beacher, Assistance Director, OTS
Nancy Gourley, Transit Operations Chief, OTS

D:\C drive files\Kincora Village Center ZMAP 2008-0021
April 27, 2009

WATER RUN ELECTION MOUNTAIN COUNTY, VA



ATTACHMENT 2

A-67

**MEMORANDUM OF AGREEMENT
BETWEEN NA DULLES REAL ESTATE INVESTOR, LLC, THE VIRGINIA STATE
HISTORIC PRESERVATION OFFICE, AND THE NORFOLK DISTRICT, CORPS OF
ENGINEERS RELATIVE TO THE KINCORA PROJECT
IN LOUDOUN COUNTY, VIRGINIA
June 4, 2008**

WHEREAS, NA Dulles Real Estate Investor, LLC (Permittee) proposes to construct a circa 424 acre mixed use development, known as Kincora, located in Loudoun County, Virginia; and

WHEREAS, pursuant to Section 404 of the Clean Water Act, permits from the Norfolk District of the U.S. Army Corps of Engineers (Corps) will be required for fill in 2.55 acres and 6,005 linear feet of jurisdictional wetlands and other waters of the United States; and

WHEREAS, pursuant to regulations at 36 CFR Part 800, regulations implementing Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, 16 U.S.C. 470f, and 33 CFR Part 325, Appendix C, Processing of Department of the Army Permits: Procedures for Protection of Historic Places, the Corps is required to take into account the effects of federally permitted undertakings on properties included in or eligible for inclusion in the National Register prior to the issuance of permits for the undertaking and to consult with the State Historic Preservation Officer (SHPO); and

WHEREAS, the Corps, in consultation with the SHPO, has determined that the permit action constitutes an undertaking within the meaning of the NHPA; and

WHEREAS the Corps, in consultation with the SHPO, has determined that the area of potential effect (APE) for the undertaking consists of the entire property within the Project boundary; and

WHEREAS, the Corps, in consultation with the SHPO, has completed a Phase I survey entitled *A Phase I Investigation of the Circa 420 Acre A. S. Ray Property Along Broad Run, Loudoun County, Virginia*, dated 2001, and a Phase II evaluation entitled *Phase II Archaeological Investigation of Site 44LD0729, Loudoun County, Virginia*, dated January 2008, and

WHEREAS, the Corps, in consultation with the SHPO, has determined that sites 44LD0103, 44LD0104, 44LD0105, 44LD0107, 44LD0109, 44LD0151, 44LD0371, 44LD0372, 44LD0421, 44LD0495, 44LD0727, 44LD0728, 44LD0730, 44LD0731 and 44LD0732 are not eligible for the National Register of Historic Places (NRHP); and

WHEREAS, the Corps, in consultation with the SHPO, has determined that site 44LD0729 is eligible for inclusion in the NRHP; and

WHEREAS, the Corps, in consultation with the SHPO, has determined that issuance of permits to the Permittee for undertakings in jurisdictional wetlands or waters of the United States will have an adverse effect on site 44LD0729; and

WHEREAS, the Corps has invited the participation of the Advisory Council on Historic Preservation (Council) to participate in consultation, and the Council has declined to participate; and

WHEREAS, the Corps invited Loudoun County (County) to participate in consultation and the County has agreed to participate; and

NOW THEREFORE, the Corps and the SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to satisfy the Corps' Section 406 responsibilities to take into account the effects of permitted activities on historic properties.

STIPULATIONS

The Corps will insure that the following stipulations are carried out:

I. TREATMENT OF ARCHAEOLOGICAL SITES

- a. The Permittee shall develop a data recovery plan for site 44LD0729. The data recovery plan shall be consistent with the Secretary of the Interior's *Standards and Guidelines for Archaeological Documentation* (48 FR 44734-37, September 29, 1983); the SHPO's *Guidelines for Conducting Cultural Resource Survey in Virginia: Additional Guidance for the Implementation of the Federal Standards Entitled Archaeology and Historic Preservation: Secretary of Interior's Standards and Guidelines* (48 FR 44742, September 29, 1983) 1999, rev. 2003, and shall take into account the ACHP's publications, *Recommended Approach for Consultation of Recovery of Significant Information from Archaeological Sites* (2002) and *Section 106 Archaeology Guidance* (June 2007) or subsequent revisions or replacements to these documents. The plan shall specify at a minimum, the following:
 1. the property, properties, or portions of properties where site specific data recovery plans shall be carried out;
 2. the portion(s) of the site(s) to be preserved in place, if any, as well as the measures to be taken to ensure continued preservation;
 2. any property, properties, or portions of properties that will be destroyed or altered without data recovery;
 3. the research questions to be addressed through data recovery, with an explanation of their relevance and importance;
 4. the methods to be used with an explanation of their relevance to the research questions;
 5. the methods to be used in analysis, data management, and dissemination of data, including a schedule;

6. the proposed disposition of recovered materials and records;
 7. proposed methods of disseminating the results of the work to the interested public and/or organizations who have expressed an interest in the data recovery; subject to revision based on the results of the data recovery proceeds;
 8. a schedule for the implementation of the treatment plan and the submission of progress reports to the Corps, the SHPO and other consulting parties.
- b. The Permittee shall submit the treatment plan to the Corps, the SHPO for review and approval. The Permittee shall provide one (1) copy to the consulting parties for review and comment. Following approval, the Permittee shall implement the treatment plan.

II. PROFESSIONAL QUALIFICATIONS

- a. All archaeological work carried out pursuant to this Agreement shall be conducted by or under the direct supervision of an individual or individuals who meets, at a minimum, the Secretary of the Interior's Professional Qualifications Standards (48 FR 44738-9, September 29, 1983) in the appropriate discipline.

III. PREPARATION AND REVIEW OF DOCUMENTS

- a. A draft of all final technical reports shall be submitted to the Corps and the SHPO and other consulting parties for review and comment. The Corps shall ensure that all comments received within thirty (30) days of report receipt shall be addressed in the final technical reports. Two copies of all final reports, bound and on acid-free paper, and one in an electronic format on CD shall be provided to the SHPO and one copy to the Corps and other consulting parties.
- b. All technical reports resulting from this agreement shall be consistent with the federal standards entitled *Archaeology and Historic Preservation: Secretary of Interior's Standards and Guidelines* (48 FR 44716-44742, September 29, 1983) and SHPO's *Guidelines for Conducting Cultural Resource Survey in Virginia* (rev. 2003) or subsequent revisions or replacements to these documents.
- c. The SHPO and other consulting parties agree to provide comments on all technical reports, treatment plans and other documentation arising from this Agreement within thirty (30) days of receipt. If no comments are received from the SHPO or other consulting parties, the Corps may assume the non-responding party's concurrence with its findings.

IV. CURATION

All archaeological materials and appropriate field and research notes, maps, drawing and photographic records collected as part of this project (with the exception of human skeletal remains) shall be cared for in the Loudoun County repository and in accordance with the requirements in 36 CFR 79, *Curation of Federally Owned and*

Administered Archaeological Collections. All such items will be made available to educational institutions and individual scholars for appropriate exhibit and/or research under the operating policies of Loudoun County.

POST-REVIEW DISCOVERIES

The Permittee shall ensure that all contracts for activities involving ground disturbance and/or construction contain the following provisions for treatment of post-review discoveries:

- a. In the event that previously unidentified archaeological resources are discovered during ground disturbing activities within the area of potential effect, the Permittee shall immediately halt all construction work involving subsurface disturbance in the area of the resource and in the surrounding area where further subsurface resources can reasonably be expected to occur and immediately notify the Corps and the SHPO of the discovery.
- b. The Corps and the SHPO, or an archaeologist approved by them, shall immediately inspect the work site and determine the area and nature of the affected archaeological resource. Construction work may then continue in the area outside the archaeological resource and any designated protective buffers as defined by the Corps and the SHPO, or their designated representative.
- c. Within five (5) working days of the original notification of discovery, the Corps, in consultation with the SHPO, shall determine the National Register eligibility of the resource.
- d. If the resource is determined eligible for the National Register, the Permittee shall prepare a plan for its avoidance, protection, or recovery of information. The Corps and SHPO shall approve such plan, prior to implementation.
- e. Work in the affected area shall not proceed until either:
 1. the development and implementation of appropriate data recovery or other recommended mitigation procedures, or
 2. the determination is made that the located resources are not eligible for inclusion on the National Register.
- f. Any disputes over the evaluation or treatment of previously unidentified resources shall be resolved as provided in the section of this Agreement entitled Dispute Resolution.

VI. HUMAN REMAINS

The Permittee shall make all reasonable efforts to avoid disturbing gravesites, including those containing Native American human remains and associated funerary artifacts. The Permittee shall treat all human remains in a manner consistent with the ACHP "Policy

Statement Regarding Treatment of Burial Sites, Human Remains and Funerary Objects" (February 23, 2007; <http://www.achp.gov/docs/hrpolicy0207.pdf>).

The Permittee shall ensure that human skeletal remains and associated funerary objects encountered during the course of actions taken as a result of this Agreement shall be treated in accordance with the Regulations Governing Permits for the Archaeological Removal of Human Remains (Virginia Register 390-01-02) found in the *Code of Virginia* (10.1-2305, et seq., Virginia Antiquities Act). The Permittee will obtain a permit from the SHPO for the removal of human remains in accordance with the regulations stated above.

The Permittee shall make a good faith effort to ensure that the general public is excluded from viewing any American Indian burial site or associated funerary artifacts. The consulting parties to this agreement shall release no photographs of any American Indian burial site or associated funerary artifacts to the press or general public. The Corps shall notify the Virginia Council on Indians (VCI) when burials, human skeletal remains, or funerary artifacts are encountered on the project, prior to any analysis or recovery. The Corps shall deliver any American Indian human skeletal remains and associated funerary artifacts recovered pursuant to this agreement to the appropriate tribe to be reinterred. The disposition of any other human skeletal remains and associated funerary artifacts shall be governed as specified in any permit issued by the SHPO or any order of the local court authorizing their removal.

VI. DISPUTE RESOLUTION

- a. Should any party to this Agreement object in writing to the Corps regarding any action carried out or proposed with respect to any undertakings covered by this Agreement or to implementation of this Agreement, the Corps shall consult with the objecting party to resolve the objection.
- b. If after initiating such consultation, the Corps determines that the objection cannot be resolved through consultation, the Corps shall forward all documentation relevant to the objection to the ACHP, including the proposed response to the objection.
- c. Within thirty (30) days after receipt of all pertinent documentation, the ACHP shall exercise one of the following options:
 1. Advise the Corps that the ACHP concurs with the Corps' proposed response to the objection, whereupon the Corps shall respond to the objection accordingly; or
 2. Provide the Corps with recommendations, which the Corps shall take into account in reaching a final decision regarding its response to the objection; or
 3. Notify the Corps that the objection will be referred for comment pursuant to 36 CFR 800.7(a)(4), and proceed to refer the objection and comment. The Corps shall take the resulting comment into account in accordance with 36 CFR 800.7(c)(4) and Section 110(l) of the NHPA.

- c. Should the ACHP not exercise one of the above options within thirty (30) days after receipt of all pertinent documentation, the Corps may assume the ACHP's concurrence in its proposed response to the objection.
- d. The Corps shall take into account any ACHP recommendation or comment provided in accordance with this stipulation with reference only to the subject of the objection; the Corps' responsibility to carry out all the actions under this Agreement that are not the subjects of the objections shall remain unchanged.
- e. At any time during implementation of the measures stipulated in this Agreement, should an objection pertaining to this Agreement be raised by a member of the public, the Corps shall notify the parties to this Agreement and take the objection into account, consulting with the objector and, should the objector so request, with any of the parties to this Agreement to resolve the objection.

VII. AMENDMENTS AND TERMINATION

- a. Any party to this Agreement may propose to the Corps that the Agreement be amended, whereupon the Corps will consult with the other parties to this Agreement to consider such an amendment. All signatories to the Agreement must agree to the proposed amendment in accordance with 36 CFR 800.6(c)(7).
- b. If the Permittee decides it will not proceed with the undertaking, it shall so notify the Corps and the SHPO, and this Agreement shall become null and void.
- c. If the Permittee determines that it cannot implement the terms of this Agreement, or if the Corps or SHPO determines that the Agreement is not being properly implemented, the Permittee, the Corps, or the SHPO may propose to the other parties to this Agreement that it be amended or terminated.
- d. This Agreement may be terminated by any signatory to the Agreement in accordance with the procedures described in 36 CFR 800.6(c)(8). Termination shall include the submission of a technical report by the Permittee on any work done up to and including the date of termination. If the Corps is unable to execute another Memorandum following termination, the Corps may choose to modify, suspend, or revoke the Department of the Army permit as provided by 33 CFR 325.7.

VIII. DURATION OF AGREEMENT


This Agreement will continue in full force and effect until five (5) years after the date of the last signature. At any time in the six-month period prior to such date, the Corps may request the signatory parties to consider an extension or modification of this Agreement. No extension or modification will be effective unless all parties to the Agreement have agreed with it in writing.

IX. FAILURE TO CARRY OUT THE TERMS OF THE MEMORANDUM

In the event that the terms of this Memorandum are not carried out, the Corps shall comply with 36 C.F.R. 800 with regard to actions covered by this Memorandum.

Execution of this Memorandum of Agreement by the Corps and the SHPO and its submission to the ACHP in accordance with 36 CFR 800.6(b)(1)(iv), shall, pursuant to 36 CFR 800.6(c), be considered to be an agreement with the ACHP for the purposes of Section 110(l) of NHPA. Execution and submission of this Agreement, and implementation of its terms, evidence that the Corps has afforded the ACHP an opportunity to comment on the proposed undertaking and its effect on historic properties, and that the Corps has taken into account the effect of the undertaking on historic properties.

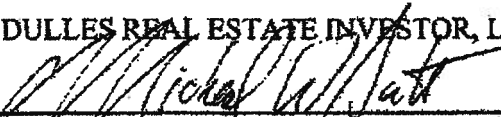
VIRGINIA STATE HISTORIC PRESERVATION OFFICER

By: 
Kathleen S. Kilpatrick
Director, Virginia Department of
Historic Resources

Date: 10/15/08

NA DULLES REAL ESTATE INVESTOR, LLC

By:



Date: 10/16/2008

Michael W. Scott

Managing Member of Notes Partners LLC, managing Member

NORFOLK DISTRICT, U. S. ARMY CORPS OF ENGINEERS

By: 
J. Robert Hume, III
Chief, Regulatory Office

Date: 10/8/08

BOARD OF SUPERVISORS

ACTION ITEM

#13b

SUBJECT: Transportation and Land Use Committee Report
SPEX 2008-0054, Kincora Village – Office/Recreational Complex

ELECTION DISTRICT: Broad Run

CRITICAL ACTION DATE: Extended to July 21, 2009

STAFF CONTACT: Judi Birkitt, Department of Planning

RECOMMENDATIONS:

Transportation/

Land Use Committee: On June 29, 2009, the Transportation and Land Use Committee voted 2-1-1 (Kurtz—opposed, McGimsey—absent) to forward this application to the Board with a recommendation of approval subject to the Conditions dated June 26, 2009, as amended by the committee.

Staff: While the office and auxiliary retail uses are consistent with Keynote Employment policies, a proposed baseball stadium is not envisioned in Keynote Employment areas. Staff finds the conditions of approval acceptable, which seek to make office uses visually prominent from Pacific Boulevard and reduce environmental impacts.

BACKGROUND:

This application seeks special exception approval to permit a 75,000 square-foot minor league baseball stadium and up to 8 office buildings (901,211 square feet) with 74,000 square feet of auxiliary uses within the PD-IP (Planned Development – Industrial Park) zoning district. The property is a 60.27-acre portion of a larger 314-acre parcel and is located at the southwest quadrant of Route 7 and Route 28 interchange, east of the Broad Run. The property is within the Route 28 Taxing District, subject to the 1972 Zoning Ordinance, and planned for Keynote Employment uses.

The Board held a public hearing on this application on June 8, 2009. There were 35 public speakers with 29 in support of the application. Six spoke in opposition, voicing concerns about traffic and environmental impacts and existing vacant office buildings. The Board voted 7-2-0 (Burton and McGimsey—opposed) to forward the application to the Transportation and Land Use Committee (TLUC) for further discussion of timing and phasing, financing, and traffic impacts.

On June 22, 2009, the TLUC discussed Comprehensive Plan issues, enhancing the project's Keynote characteristics, water quality testing, and limiting special events to non-peak hour traffic times. Based on the applicant's June 17th traffic analysis and subject to a condition limiting special events to off-peak periods, transportation issues were resolved, but additional environmental details were needed. The committee continued the meeting to June 29th for further discussion.

On June 26, 2009, the applicant submitted an environmental plan for the TLUC's review. The plan proposes mitigating environmental impacts outside of the limits of the special exception area on the larger Kincora property. At the June 29th TLUC meeting, the committee expressed concern regarding the off-site preservation and mitigation. The committee also discussed water quality monitoring, the impact

of fireworks upon the heron rookery, weekday game start time, and the trigger for constructing four lanes of Pacific Boulevard. The committee voted 2-1-1 (Kurtz—opposed, McGimsey—absent) to forward the application to the Board with a recommendation of approval, subject to the Conditions dated June 26, 2009, as amended by the committee.

Staff provides the following issue update since the June 29, 2009 TLUC meeting:

1. Land Use – A stadium is not a use envisioned in areas planned for Keynote Employment. Conditions seek to make office uses visually prominent from Pacific Boulevard.
2. Transportation – Conditions have been added to limit weekday game start time to no earlier than 7:00 p.m. (Condition 5) and to require construction of 4 lanes of Pacific Boulevard with either the stadium or with 300,000 square feet of office uses (Condition 24).
3. Environmental
 - a. Mitigation Plan - The applicant submitted a revised mitigation plan on July 9, 2009 (Exhibit B - Restoration Concept Plan). The request to mitigate environmental impacts outside of the limits of the special exception remains the same, with minor clarifications on the mitigation types and acreages presented in the table. The County Attorney has no issue with locating mitigation for environmental impacts outside of the limits of the special exception and recommends conditions that would require the applicant to: (a) complete the mitigation shown on Exhibit B prior to occupancy of the first site plan for a special exception use on the property, (b) bond the mitigation areas (i.e., planting trees, enhancing streams), and (c) grant the preservation and mitigation areas to the County as contained in an Open Space Easement Area (Conditions 37-40). The Applicant agrees to such conditions, as well as a condition requiring the size of the trees within the reforestation areas shown on Exhibit B to be three gallon.
 - b. Water Quality Monitoring – The water quality monitoring condition has been revised to require quarterly testing, immediate action to investigate any identified water quality issues, and if the issue is a result of activity on the property, immediate remediation (Condition 43).
 - c. Fireworks Impacts Upon Heron Rookery – The Virginia Department of Game and Inland Fisheries (DGIF) advises that due to the temporary and periodic nature of fireworks, and since fireworks would be occurring outside of the 1,400-foot protective buffer, adverse impacts are not likely and placing a time of year restriction on fireworks is not necessary. The Applicant has agreed to a condition that would prohibit fireworks March 1 through June 30, during the nesting period, which is consistent with the Loudoun Wildlife Conservancy's recommendation (Refer to Attachment 2 and Condition 45). Additionally, the trail connection to the Broad Run referred to in Condition 30 would not impact the rookery, since the trail would be located more than 1,000 feet from the rookery.
4. Conditions of Approval – The attached comparison version of the conditions of approval (Attachment 4) reflects the TLUC's revisions and includes locating mitigation for environmental impacts outside of the special exception area on the larger Kincora property. Conditions have been reviewed by the County Attorney's Office. The Applicant is in agreement with the Conditions. A clean version of the Conditions in final form will be provided in a supplemental packet.

FISCAL IMPACT:

Staff views the fiscal impact related to this special exception application as being dependent upon other ongoing processes and decisions. It is difficult to examine the fiscal impact of the proposed special

exception absent a larger discussion of the differing development plans for the entire Kincora area. If the applicant's associated rezoning or other affiliated financing vehicles are examined by the Board of Supervisors, staff will provide additional analysis based upon the development plans presented at that time.

ALTERNATIVES:

The Board may approve, deny, or continue discussion of the special exception request, subject to a timeline extension by the Applicant.

DRAFT MOTIONS:

1. I move that the Board of Supervisors approve SPEX 2008-0054, Kincora Village – Office/Recreational Complex, subject to the Conditions of Approval dated July 16, 2009, contained in Attachment 4, and with the attached Findings for Approval.

OR,

2. I move that the Board of Supervisors deny SPEX 2008-0054, Kincora Village – Office/Recreational Complex based on the following Findings:

OR,

3. I move an alternate motion.

ATTACHMENTS:

1. Vicinity Map
2. Correspondence Regarding Fireworks from the Virginia Department of Game and Inland Fisheries (7/15/09) and the Loudoun Wildlife Conservancy (3/6/09)
3. TLUC Findings for Approval
4. Conditions of Approval Comparison Version (as amended by the TLUC, including recommended revisions by Zoning and the County Attorney's Office)
5. Conditions of Approval, dated July 16, 2009

equipment fixtures shall be screened from view from Pacific Boulevard and Route 28 through landscaping, fencing, parapet walls, architectural treatment, or berming.

~~15-21.~~ Lighting. All exterior lighting within the Special Exception Area shall be designed and installed to minimize light trespass and the ~~view-visibility~~ of lighting from properties ~~outside~~ offsite of the Special Exception Area. The following standards shall also apply:

- a. Light Fixtures. Exterior building, parking structure, and parking lot lighting shall be ~~full~~ cut-off and fully shielded and shall direct light downwards and into the interior of the Property and away from surrounding public roads and properties. The light element (lamp or globe) of a fixture shall not extend below the cutoff shield. Low pressure sodium lamps shall be prohibited throughout the Property.
- b. Plaza and Exterior Building Lighting. Lighting within the plaza areas (as designated on the SPEX Plat) and exterior building lighting associated with the office and auxiliary uses, including security lighting, shall not exceed a maximum average illumination of five (5) foot-candles at grade level unless otherwise required by law, ordinance, or regulation.
- c. Parking Lot Lighting. All parking lot lighting within the Special Exception Area shall not exceed a maximum average illumination of two (2) foot-candles at grade level. Parking lot lighting shall be turned off within one hour following the end of evening activities, exclusive of safety or security lighting.
- d. Recreational Facility Complex Lighting. Outdoor lighting at the recreational facility shall be Musco Light-Structure Green™ outdoor field lighting or the performing equivalent. If the outdoor field lighting needs to be replaced, the replacement lighting shall match the existing lighting model or be replaced with an equivalent or more technologically advanced outdoor field lighting model designed to provide equivalent or better reduction of off-site glare and reflection. Outdoor recreational facility lighting shall be directed inward and downward toward the field and shall incorporate a reflector technology system that directs light onto the field and minimizes glare and spillage onto adjacent properties. Recreational facility lighting shall be turned off within one hour following the end of evening activities, exclusive of safety or security lighting.

Transportation

~~20-22.~~ Route 28 Right-of-way. Prior to approval of the first site plan for any Special Exception Use ~~subject to this special exception,~~ the Applicant shall grant to the County a reservation for future public street dedication of reserve ~~sufficient~~ right-of-way to permit the future widening of Route 28 as an eight-lane divided roadway, together with any necessary as well as temporary construction and drainage easements, if needed. Such right-of-way shall be dedicated to the County or VDOT upon request by the County or VDOT and at no cost to the County or VDOT.

~~21-23.~~ Pacific Boulevard Right-of-way Dedication. Prior to approval of (1) the first site plan for any use ~~subject to this special exception~~ Special Exception Use or at the request of the

County, the Applicant shall dedicate to the County, at no cost to the County, sufficient right-of-way, as shown on the SPEX Plat, for construction of a full four (4) lane divided section of Pacific Boulevard, including applicable turn lanes and easements, from Gloucester Parkway to the northernmost entrance from Pacific Boulevard into the Property as shown on the SPEX Plat.

24. Pacific Boulevard Construction. Prior to approval of (1) the first site plan for (4) the recreational facility or (2) the site plan for office uses that would result in the aggregate of office uses on the Property exceeding in excess of 300,000 square feet, whichever occurs first, the Applicant shall construct, as shown on the SPEX Plat, the full four (4) lane divided section of Pacific Boulevard from Gloucester Parkway to the northernmost entrance from Pacific Boulevard into the Property and including applicable turn lanes and easements, sidewalks, and a multi-purpose trail. Such road shall be open to public traffic prior to issuance of the first occupancy permit for (1) the recreational facility or (2) office uses that would result in the aggregate of office uses on the Property exceeding in excess of 300,000 square feet, whichever occurs first.

If the first site plan for the Property does not include the recreational facility or office uses that would result in the aggregate of office uses on the Property exceeding in excess of 300,000 square feet, then, prior to approval of the first site plan for the Special Exception Area, the Applicant shall construct a half-section of Pacific Boulevard including necessary turn lanes, easements, sidewalks, and a multi-purpose trail, subject to approval by VDOT and the County. Such road shall be open to public traffic prior to issuance of the first occupancy permit for a Special Exception Use on the Property.

22.25. Pacific Boulevard Trail and Sidewalk. Prior to approval of the first site plan for the ~~special exception uses~~ Special Exception Area, the Applicant shall:

- a. Dedicate an easement along the west side of the Pacific Boulevard right-of-way dedication, referenced in condition 23 above, that is a minimum of 14 feet in width and varying up to 16 feet in width where the topography, vegetation, utilities, and screening/buffering allow, for the purpose of constructing a multi-purpose trail that is a minimum of 10 feet in width and expands up to 12 feet in width where the topography, vegetation, utilities and screening/buffering allow, and
- b. In addition to the right-of-way dedicated pursuant to condition 23 above, dedicate additional ~~Include right-of-way in the dedication for~~ Pacific Boulevard as shown on the SPEX Plat from Gloucester Parkway to the median crossover for the southernmost portion of the Special Exception Area for the purpose of constructing a five (5) foot wide sidewalk. The Applicant shall provide, subject to VDOT and County approval, a painted crosswalk at the median crossover for the southernmost portion of the Special Exception Area to connect the sidewalk on the east side of Pacific Boulevard with the trail on the west side of Pacific Boulevard.

26. Turn Lanes. Prior to approval of the first site plan that includes the recreational facility, the Applicant shall construct dual left turn lanes from southbound Pacific Boulevard onto eastbound Gloucester Parkway and single left turn lanes from northbound Pacific Boulevard

~~at into site entrances # 2 and # 3 of the Special Exception Area the two southernmost site entrances from northbound Pacific Boulevard into the recreational facility (site entrances #2 and 3 as depicted on the Traffic Impact Analysis Exhibit C).~~ All turn lanes shall be in conformance with applicable VDOT standards.

27. Traffic Signalization at Pacific Boulevard and Each Site Entrance. The Applicant shall install traffic signals at each of the three site entrance intersections with Pacific Boulevard and at the intersection of Pacific Boulevard and Gloucester Parkway when warranted. The Applicant shall submit to the County and VDOT a traffic signal warrant study in an acceptable format to the County and VDOT (a) in conjunction with the submission of the first site plan for the recreational facility, or (b) at the request of the County in association with subsequent site plan submissions. If warranted, the Applicant shall install the signal(s) subject to VDOT approval, and the signal(s) shall be operational prior to the issuance of the first occupancy permit for the site plan in which the traffic study warranted a traffic signal. The Applicant shall fund all warrant study and signalization costs.
28. Traffic Operations Plan ("TOP"). The Applicant shall provide personnel, at no cost to the County, to direct and manage traffic that is entering and exiting the Property for athletic games and special events at the recreational facility. In conjunction with submission of the first site plan for the recreational facility, the Applicant shall submit a TOP to the Office of Transportation Services and the Fire and Rescue Office of Emergency Management for review and approval to ensure that no unmitigated traffic conditions are created during athletic games and special events at the recreational facility. The TOP shall address issues related to ingress/egress, traffic flow, parking, and pedestrian circulation and safety. The TOP shall also address when and where a demand exists for the Applicant to transport attendees from Loudoun County towns and villages to and from athletic games.
29. Pedestrian Connection to Broad Run. At the request of the County, the Applicant shall provide a pedestrian point of connection from the recreational facility to the Broad Run floodplain for purposes of connecting to the trail system proposed to be located within the Broad Run floodplain corridor.
30. Private Streets. All private streets developed on the Property shall be owned and maintained by an Owners Association (OA) with appropriate covenants, restrictions, maintenance obligations, and assessments to be set forth in a declaration of covenants and restrictions, in form as approved by the County Attorney, recorded among the land records of Loudoun County prior to the first plat creating such private streets. Private streets shall be created and established as recorded private access easements, subject to County review and approval at the time of applicable site plan approvals, and shall be designed and constructed as shown on Sheet 13A of the SPEX Plat (labeled Road Sections) and in accordance with the standards of the Loudoun County Facilities Standards Manual (FSM) applicable at the time such private streets are submitted to the County for approval.
31. Highway Noise. In conjunction with submission of the initial site plan for ~~the any Special Exception~~ uses that are located within 1,500 feet of Route 28 or Gloucester Parkway, the Applicant shall submit a noise impact analysis to the County for review of the projected noise impacts from Route 28 and Gloucester Parkway on such uses. The Applicant shall

incorporate mitigation strategies that result in noise levels of 65 dBA or lower for the plaza area and recreational facility and 70 dBA or lower for the office uses.

Transit

27-32. Bus Shelters. Prior to issuance of the initial occupancy permit for any use subject to this Special Exception, the Applicant shall install, at no cost to the County, two (2) bus shelters along Pacific Boulevard within the Special Exception Area and in locations to be determined in coordination with the Office of Transportation Services or other appropriate County agency. The bus shelters shall be maintained by the OA and shall be depicted on each site plan

28-33. Employee Shuttle. Prior to issuance of an occupancy permit for the first office building adjacent to Pacific Boulevard, the Applicant shall provide a private shuttle service utilizing vehicles with a minimum capacity of twenty (20) persons for the transport of employees between ~~the Property~~said office building and the nearest local transit facility. In addition, until such time as regional transit service is available to the site, the Applicant shall provide shuttle service to the nearest park-and-ride facility or regional transit facility.

29-34. Transit for Recreational Facility Attendees. The Applicant shall work with the Loudoun County Office of Transportation Services (OTS) to identify viable options for providing public mass transit to the general public before and after athletic games and special events at the recreational facility. These options may include (but are not limited to) the Applicant funding after hours service or rerouting of some of the local fixed route transit services to provide transit to and from the recreational facility; contracting with private transportation providers for shuttles to certain neighborhoods; or utilizing buses owned and operated by the Applicant to ~~access~~provide transit service to designated communities. To the extent there is adequate demand as determined by the County, the Applicant, at the Applicant's expense, shall meet this transportation need. The Applicant shall initiate and maintain a marketing program to promote such shuttle service, and shall include references to this service in advertising related to the recreational facility.

Transportation Demand Management (TDM)

30-35. The Applicant's TDM program shall consist of the following:

- a. Preferred Parking Spaces. Provide signage designating a minimum of five percent (5%) of the parking spaces provided for each office building as preferred parking spaces for (a) carpool/vanpool vehicles, or (b) fuel efficient or car sharing vehicles. These preferred parking spaces shall be identified on the site plan for each respective office building and shall be located proximate and convenient to the primary entrance of the office building, while allowing for handicapped accessible parking spaces.
- b. Employee Transportation Coordinator (ETC). Identify an Employee Transportation Coordinator from each office building to serve as the primary TDM contact with the Loudoun County Office of Transportation Services. ETCs shall promote and encourage

commuting alternatives in cooperation with other private and public TDM efforts or Transportation Management Associations. ETC's shall meet with OTS staff to clarify commuting options to the site, and formulate promotions and programs.

- c. Employee Commute Surveys. Conduct initial and biennial employee commute surveys to benchmark and measure progress toward reducing vehicle trips and vehicle emissions.
- d. Information Access. Provide access to alternative commute information, including free carpool ridematching service, on-site transportation fairs or similar efforts. The Applicant shall provide all new hires (full-time, part-time or contract) written information on alternative commute options and efforts toward congestion mitigation and compliance with air quality standards.
- e. Biennial Travel Reduction Plans. Prior to occupancy of the first office building, submit to OTS biennial travel reduction plans outlining strategies for reducing vehicle trips during peak hours.
- f. Display Racks. Prior to occupancy of the first office building, install and maintain permanent displays or "take one" racks for alternative commute information such as transit schedules, park and ride lot maps, rideshare information and incentives, in the office buildings.
- g. Intranet/Internet Presence. Prior to occupancy of the first office building, provide information on office employers' intranet or internet sites detailing alternative modes of transportation and other travel reduction measures.
- h. Flextime/Telework/Compressed Work Schedules. Prior to occupancy of the first office building, promote flextime, compressed work schedules, and telework to decrease employee travel during peak hours. This promotion shall include at a minimum an annual transportation fair for employees and including educational materials in the tenant handbook. In addition, commuting educational materials shall be included in the tenant handbook, prepared by the Applicant and distributed to all tenants.
- i. Bicycle Storage Facilities/Racks. The Applicant shall install secure and weather-protected bicycle storage facilities or racks for a minimum of twenty (20) bicycles for each office building and a minimum of thirty (30) bicycles for the recreational facility. Such minimum bicycle storage facilities/racks shall be installed prior to the occupancy permit for each respective office building and the recreational facility, at strategic locations on the Property that provide ease of access to entrances and facilities and separation from vehicular traffic patterns. The location and type of bicycle racks used shall be consistent with the recommendations outlined in the Association of Pedestrian and Bicycle Professionals (APBP) "Bicycle Parking Guidelines". The locations of such secure bicycle storage facilities shall be depicted on the respective site plans for each office building and the recreational facility.
- j. Showers and Lockers. Prior to occupancy of each office building, provide accessible

showers, changing facilities, and lockers in each office building.

Environmental

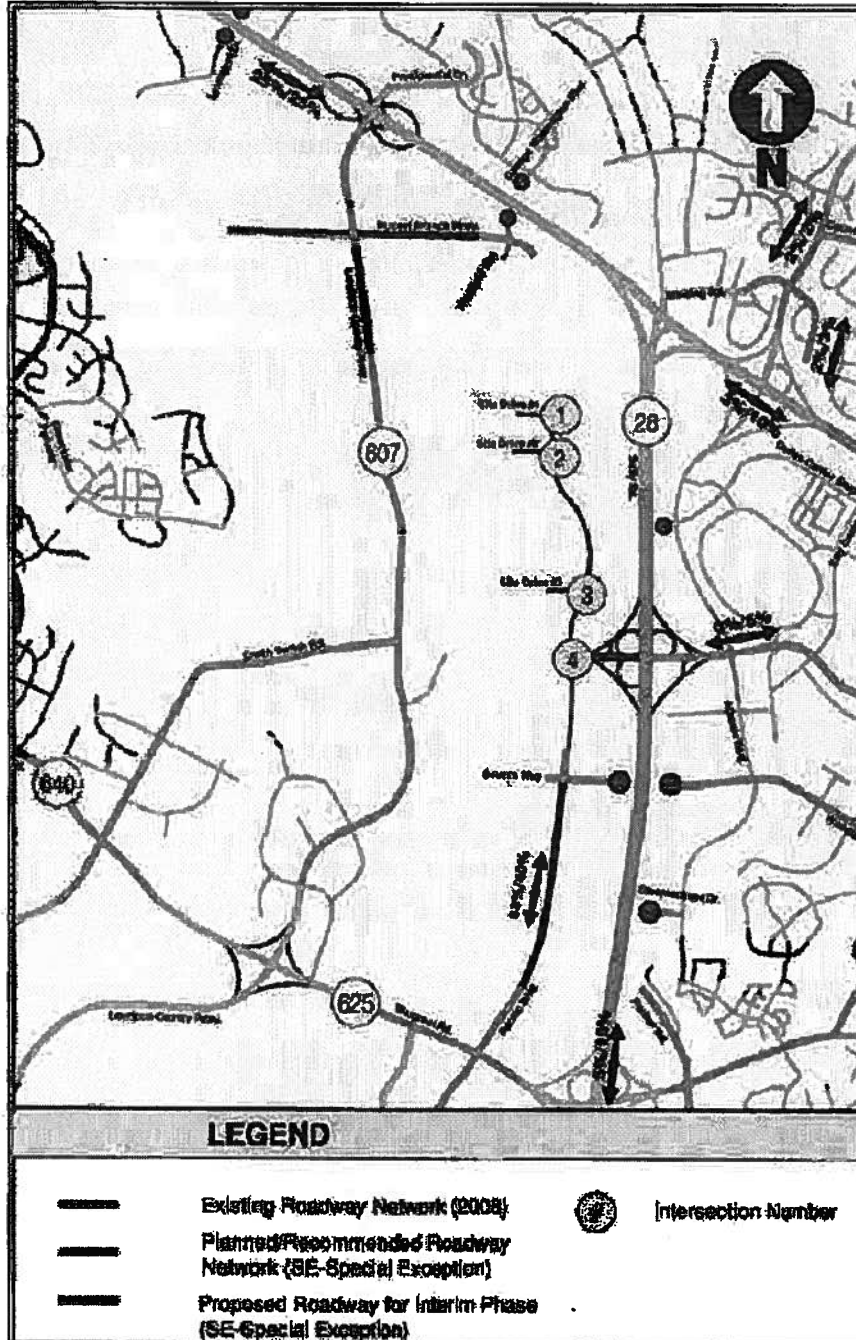
31-36. Limits of Clearing and Grading. The limits of clearing and grading shall be depicted as shown on the SPEX Plat on each site plan submission. Encroachments beyond the limits of clearing and grading shall only be permitted for utilities, road access, stormwater management facilities, wetland and stream mitigation activities, or connections to trails located within the floodplain.

32-37. Wetland and Stream Mitigation, Riparian Preservation and Reforestation, and Wetland Mitigation Bank. Prior to issuance of the first occupancy permit for any of the Special Exception Uses on the Property, the Applicant shall, subject to issuance of, and pursuant to, all requisite permits and approvals, provide wetland mitigation, stream enhancement, riparian preservation and reforestation, and install the wetland mitigation bank in the amounts specified in, at the general locations depicted on, and of a character consistent with, the Kincora Broad Run Restoration Concept Plan dated June 2009, as revised through 7/8/09, prepared by Wetland Studies and Solutions, Inc. of Gainesville, Virginia (the "Restoration Concept Plan"), attached to these Conditions as Exhibit B. Such wetland mitigation, stream enhancement, RSCRE reforestation, riparian preservation and reforestation, and wetland mitigation bank shall be in substantial conformance with the design specifications, success criteria, and monitoring program contained in the Kincora On-Site Mitigation Plan (Grading Permit X20090680001) dated April 2008, as amended and approved by the County, with the exception that the planting plan (Sheets 26 through 40) shall be upgraded to incorporate the following minimum specifications for the category labeled "Additional Trees (Required for All Alternative)" depicted on Sheets 37 through 39 and labeled as "on Sheet 40: three (3) gallon, containerized, native deciduous trees planted at a density of 222 trees per acre on a fourteen (14) foot by fourteen (14) foot staggered grid.

In the event that stream and wetland mitigation exceeding the quantities identified in Exhibit B is required to offset impacts associated with the Special Exception Uses on the Property (PIN #041-29-8238), the Applicant shall provide the additional mitigation elsewhere on the Property and/or on Tax Map Parcel PIN #'s 042-29-6582 and/or 042-49-0209 to the maximum extent possible. If such additional mitigation cannot be provided on the aforementioned Tax Map Parcels, the Applicant shall provide the mitigation according to the following prioritized order: (1) within the Broad Run Watershed within the same geographic Planning Policy Area, (2) within the Broad Run Watershed outside the Property's geographic Planning Policy Area, and (3) within Loudoun County, subject to approval by the U.S. Army Corps of Engineers and the Virginia Department of Environmental Quality.

32-38. Open Space Easement. Prior to the approval of the first site plan or construction plans and profiles for any Special Exception Use on the Property, the Applicant shall grant the County a perpetual Open Space Easement pursuant to Title 10.1, Chapter 17 Open- Space Land Act of the Code of Virginia ("Easement"), over and upon all of the land areas identified on the Restoration Concept Plan (Exhibit B) by the following labels: "Riparian Preservation Area", "Conservation Area", "Riparian Reforestation Area", "RSCRE Reforestation Area",

EXHIBIT C



constructed by the private sector, meet standards that allow their acceptance into the state system for maintenance/operation. The County intends to continue the current VDOT/County relationship and to implement changes in VDOT policies and standards. These changes will provide a cost-effective and safe road network with flexibility to accommodate the County's land use and community design objectives.

The County continues to encourage VDOT to participate as a member of the County's transportation planning team. At the same time, the County will continue its present practice of reviewing VDOT project plans for VTDP and Secondary Road Improvement Programs, while taking steps with VDOT to arrange a more formal role for the County and local citizens and associations in the design process. The County will continue to urge VDOT to design its projects in rural Loudoun County with more sensitivity to the environment, the ambiance, and rural character of the area. Examples of road improvements that have been designed with extensive participation by the County and local citizens include Snickersville Turnpike (Route 734), and Lime Kiln Road (Route 733).

State and County Partnership Policies

1. The County will continue to encourage the Virginia Department of Transportation (VDOT) to participate in long-range planning processes to provide the input for the formulations of County transportation policy.
2. The County will increase its involvement in VDOT decision processes and will continue to seek mutually acceptable policy positions through formal and informal channels. Participation of local citizens and associations in local road design will be encouraged as part of the Primary and Secondary Road Programs.
3. The County will continue to seek VDOT's input into development applications through the County's application referral process, and by working with VDOT and applicants to ensure that proposed public streets are accepted into the state's system.



The County, VDOT, and local citizens collaborated on the road improvements to Snickersville Turnpike (Route 734).

Level of Service Standards

The County devotes attention to the comprehensive review of land development applications. The adequacy of the road network serving a property is frequently one of the most significant issues faced in the development process. The *Revised General Plan* and associated area plans outline where growth can occur and the allowable densities, while the *Revised Countywide Transportation Plan* provides direction concerning existing and planned transportation facility capacities.

The *Revised Countywide Transportation Plan* and *Facilities Standards Manual (FSM)* serve as a guide for all transportation improvements in the County. Specific provisions of the *Land Subdivision and Development Ordinance (LSDO)* and the *Zoning Ordinance* also address the intended purpose that various types of roads serve different kinds of development. Land development proposals are reviewed for conformance with the policies of the *Revised Countywide Transportation Plan* as well as to determine whether the planned transportation network can support the proposed development. The County provides specific criteria in evaluating applications that will be used to ensure that higher intensity development typical of the Suburban Policy Area does not lead to a drop in level of service (LOS) below LOS 'D' on roads. LOS 'D', on a scale of 'A' through 'F', is an accepted design goal during peak periods for transportation facilities in urban areas. Travel speeds and the freedom to maneuver under LOS 'D' begin to decline with increasing volumes due to the traffic stream's limitation on absorbing disruptions. Traffic conditions, nonetheless, are stable and severe congestion is avoided.

Maintaining LOS 'C', characterized by less impeded conditions, throughout the day is not practical and would be cost prohibitive to implement in an urbanizing area. The *Revised Countywide Transportation Plan* states that the LOS on the eastern road network should not fall below LOS 'D'.

Level of Service (LOS) Standards Policies

1. Land development will only occur along roads that currently function at Level of Service 'D' or better in the Suburban and Transition Policy Areas where planned road improvements would improve the level of service; or alternatively development may occur where the developer provides the improvements consistent with the phases of the development in a timely manner such that the LOS does not fall below LOS 'D'. Improvements for the first phase of a development will be provided in advance of development.
2. Level of Service 'D' or better must be demonstrated for new development at the time of the construction of the first residential unit or commercial/industrial building in the Suburban and Transition Policy Areas, using peak hour and daily traffic volumes, for existing and future road network.
3. A traffic analysis will be performed as required by the Zoning Ordinance and *Land Subdivision and Development Ordinance*. Traffic studies are required for land use applications regardless of the number of trips or the size of the development. However, the scope of the traffic study information can vary depending on the specific case and location. Transportation staff will meet with the applicant to discuss and agree on the scope of the study prior to submission.
4. The first and subsequent phases of development of each project permitted by rezoning will be defined by the actual capacity of the existing road network or improvements to be completed by the developer, VDOT or others prior to the completion of any residential or other approved land use by the existing level of service.

Local Control and Management Options

In Virginia, responsibility for roads in most counties lies with the state. However, state legislation permits counties to take responsibility for road management. This local control is mandatory in incorporated communities larger than 3,500 people and in cities. Leesburg presently has this responsibility and Purcellville is likely to be required to take this on soon. Recent indications are that the state may encourage increased local responsibility as a means of reducing costs. The terms of transferring responsibility from VDOT to Loudoun County would require agreement by the Commonwealth Transportation Board and voter approval in a public referendum. Local management and responsibility for roads would entail significant costs to the County.

It has been estimated, based on a 1993 Fairfax County study, that should Loudoun choose to maintain its local roads, the County could face annual maintenance expenditures of up to \$10 million, depending on the level of state funding to the County. This figure does not include the potentially larger costs of additional preconstruction and review staff, equipment, materials, and other costs associated with local control of secondary roads. For now, the County has chosen to continue relying on VDOT's management and maintenance support of all primary and secondary public roads in the county. The County will simultaneously examine ways of working with VDOT to allow for the efficient and flexible use of maintenance funds for appropriately-designed improvements.

The Public-Private Transportation Act of 1995 (PPTA) is the legislative framework enabling the Commonwealth of Virginia, qualifying local governments and certain other political entities to enter into agreements authorizing private entities to acquire, construct, improve, maintain, and/or operate qualifying transportation facilities. The public entities may either solicit or accept unsolicited proposals from private sources. Loudoun County may exercise the opportunities offered by the PPTA to fund needed transportation improvements in the Route 28 and Dulles Greenway Corridors. Planned transportation projects beyond those currently constructed in these corridors will be evaluated to assess whether application of the PPTA is appropriate.

TRIP GENERATION (REZONING APPLICATION - PHASE I - 2011)

In order to calculate the trip generation for the proposed development program (Phase I) by 2011, the ITE's Trip Generation, 7th Edition publication was used to determine the trips into and out of the project site for the weekday morning and afternoon peak hours as well as for an entire weekday. Average daily volumes for residential developments were estimated based on Loudoun County's trip generation rates.

In addition to the new site trip estimates, trip generation reductions were considered to account for internal synergy, pass-by trips, and mode split reduction, which are listed below:

- *Pass-by trips:* A 25% reduction will be considered on proposed retail trips during the afternoon peak period only to represent traffic pulled from background traffic stream.
- *Internal trips:* According to the VDOT's guidelines for Chapter 527 traffic study, internal capture reduction will be considered for mixed-use land bays.
- *Mode split reduction:* A 10% reduction on proposed office and residential trips will be considered to reflect expected transit usage mode split by future public transportation within the study area. This reduction assumes associated transit commitments from the applicant for implementation.

Table 3: Trip Generation (Rezoning Application - Phase I - 2011)

Land Use	ITE Code	Size	Units	Weekday						Saturday			
				AM Peak Hour			PM Peak Hour			Daily Total	Peak Hour of Generator		
				In	Out	Total	In	Out	Total		In	Out	Total
APPROVED USE - PHASE I													
PD-IP (0.4 FAR)													
Office Park	750	1050.2	kSF	1,391	171	1,562	193	1,184	1,377	11,353	110	38	148
PROPOSED PLAN - MIXED USE DEVELOPMENT - PHASE I													
Residential Development													
Townhouses/Condos	230	700	DU	42	203	245	199	98	297	6,090	133	113	246
Internal Trip Reduction		15%		-7	-30	-37	-30	-15	-45	-914	-20	-17	-37
Mode Split Reduction		10%		-5	-21	-26	-22	-10	-32	-653	-15	-12	-27
Subtotal Residential Development		700	DU	30	153	183	149	73	222	4,567	99	85	184
Office Development													
Hotel	310	270	Rooms	87	54	141	85	75	160	2,044	107	84	191
Office Park	750	900.0	kSF	1,222	150	1,372	168	1,028	1,196	9,788	94	32	126
Subtotal Office Development		1,170.0	kSF	1,309	204	1,513	253	1,103	1,356	11,832	201	116	317
Internal Trip Reduction		15%		-27	-6	-33	-9	-19	-28	-530	-4	-4	-8
Mode Split Reduction		10%		-131	-21	-152	-26	-110	-136	-1,184	-21	-11	-32
Subtotal Office Development		1,170.0	kSF	1,151	177	1,328	218	974	1,192	10,118	176	101	277

Land Use	ITE Code	Size	Units	Weekday						Saturday			
				AM Peak Hour			PM Peak Hour			Daily	Peak Hour of Generator		
				In	Out	Total	In	Out	Total	Total	In	Out	Total
Retail Development													
Shopping Center	820	150.0	kSF	122	78	200	394	425	819	8,839	587	540	1127
Internal Trip Reduction		15%		-3	-1	-4	-6	-11	-17	-384	-13	-16	-29
Pass-by Reduction		25%		-31	-19	-50	-99	-106	-205	-2,210	-147	-135	-282
Subtotal Retail Development		150.0	kSF	88	58	146	289	308	597	6,245	427	389	816
Stadium													
Baseball Stadium*		5,500	Seats	N/A	N/A	N/A	N/A	N/A	N/A	N/A	386	15	401
Total Proposed Site Trips (Without Reductions)				1,473	485	1,958	846	1,626	2,472	26,761	1,307	784	2,091
Total Reduced Trips				-204	-97	-301	-190	-271	-461	-5,831	-219	-194	-413
TOTAL PROPOSED SITE TRIPS (WITH REDUCTIONS)				1,269	388	1,657	656	1,355	2,011	20,930	1,088	590	1,678
Difference (Proposed – Approved)				-122	217	95	463	171	634	9,577	978	552	1,530

*Trip Generation based on Observed Rates (Details in the appendix)

Table 3 shows that the project site will generate approximately 1,657 new weekday morning peak hour trips, approximately 2,011 new weekday afternoon peak hour trips, approximately 1,678 new Saturday peak hour trips, and approximately 20,930 new average daily trips with the proposed Kincora development in 2011.

SITE TRAFFIC DISTRIBUTION AND ASSIGNMENT (2011)

Site Access

Access to the proposed Kincora site will be provided along the future Pacific Boulevard. The project site will be primarily served by Route 28 and the planned grade-separated interchange at the existing intersection of Route 28 with Nokes Boulevard. The site will be bisected by future regional roads, such as Pacific Boulevard and Gloucester Parkway. These regional roads are planned for a capacity in excess of what is required to serve the site during the interim 2011 traffic conditions. The graphics included in this section represent the regional benefits these roads provide by showing them serving a dual purpose. The following is a description of these two roads:

- **Pacific Boulevard (from existing terminus north to Future Site Drive #1)** will be a two-lane, local access, rural road with left and right turn lanes at major intersections in 2011.
- **Gloucester Parkway (from Route 28/Nokes Boulevard interchange west to Pacific Boulevard)** will be a four-lane, controlled access, median divided, major collector with left and right turn lanes at at-grade intersections in 2011.

TRIP GENERATION (REZONING APPLICATION PHASE II - 2015)

In order to calculate the trip generation for proposed development program by 2015, the ITE's Trip Generation, 7th Edition publication was used to determine the trips into and out of the project site for the weekday morning and afternoon peak hours as well as for an entire weekday. Average daily volumes for residential developments were estimated based on Loudoun County's trip generation rates.

In addition to the new site trip estimates, trip generation reductions were considered to account for internal synergy, pass-by trips, and mode split reduction, which are listed below:

- *Pass-by trips:* A 25% reduction will be considered on proposed retail trips during the afternoon peak period only to represent traffic pulled from background traffic stream. A 40% reduction was applied to the proposed bank.
- *Internal trips:* According to the VDOT's guidelines for Chapter 527 traffic study, internal capture reduction will be considered for mixed-use land bays.
- *Mode split reduction:* A 10% reduction on proposed office and residential trips will be considered to reflect expected transit usage mode split by future public transportation within the study area. This reduction assumes associated transit commitments from the applicant for implementation.

These reductions were applied to the appropriate site trip assignment. Table 8 presents the new trips generated by the proposed development program in 2015.

Table 8: Trip Generation (Rezoning application, Phase II - 2015)

Land Use	ITE Code	Size	Units	Weekday						Saturday			
				AM Peak Hour			PM Peak Hour			Daily	Peak Hour at Generator		
				In	Out	Total	In	Out	Total	Total	In	Out	Total
APPROVED USE - PHASE II													
PD-IP (0.4 FAR)													
Office Park	750	3,132.0	KSF	3,481	430	3,911	546	3,350	3,896	33,045	325	114	439
PROPOSED PLAN - MIXED USE DEVELOPMENT - PHASE II													
Residential Development													
Townhouses/Condos	230	1,400	DU	73	354	427	352	172	524	12,180	243	206	449
Internal Trip Reduction		15%		-11	-54	-65	-53	-26	-79	-1,827	-37	-31	-68
Mode Split Reduction		10%		-8	-35	-43	-36	-17	-53	-1,218	-25	-20	-45
Subtotal Residential Development		1,400	DU	54	265	319	263	129	392	9,135	181	155	336
Office Development													
Hotel	310	720	Rooms	289	184	473	226	199	425	6,071	282	220	502
Office Park	750	1,700.0	KSF	2,084	257	2,341	303	1,861	2,164	18,124	177	61	238
Subtotal Office Development		2,420.0	KSF	2,373	441	2,814	529	2,060	2,589	24,195	459	281	740

Kincora- Traffic Impact Study

Land Use	ITE Code	Size	Units	Weekday						Saturday			
				AM Peak Hour			PM Peak Hour			Daily Total	Peak Hour of Generator		
				In	Out	Total	In	Out	Total		In	Out	Total
Internal Trip Reduction	15%			-42	-9	-51	-15	-30	-45	-1,060	-7	-8	-15
Mode Split Reduction	10%			-238	-44	-282	-53	-206	-259	-2,420	-46	-28	-74
Subtotal Office Development	2,420.0	kSF		2,093	388	2,481	461	1,824	2,285	20,715	406	245	651
Retail Development													
Shopping Center	820	209.0	kSF	149	95	244	490	529	1,019	10,966	727	671	1398
Health/Fitness Club	492	35.0	kSF	19	24	43	73	69	142	1,153	46	45	91
Drive-in Banks	912	15.0	kSF	111	87	198	366	366	732	3,175	303	291	594
High-Turnover (Sit-Down) Restaurants	932	40.0	kSF	240	221	461	267	170	437	5,086	504	296	800
Subtotal Retail Development	300.0	kSF		519	427	946	1,196	1,134	2,330	20,380	1,580	1,303	2,883
Internal Trip Reduction	15%			-12	-2	-14	-11	-23	-34	-767	-24	-29	-53
Pass-by Reduction (Bank)	40%			-45	-35	-80	-147	-146	-293	-1,270	-122	-116	-238
Pass-by Reduction (Retail)	25%			-38	-23	-61	-123	-132	-255	-2,742	-182	-168	-350
Subtotal Retail Development	300.0	kSF		424	367	791	915	833	1,748	15,601	1,252	990	2,242
Stadium													
Baseball Stadium	5,500	Seats		N/A	N/A	N/A	N/A	N/A	N/A	N/A	386	15	401
Civic Use													
Performing Arts Center*	120.0	kSF		N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Proposed Site Trips (Without Reductions)				2,965	1,222	4,187	2,077	3,366	5,443	56,755	2,668	1,805	4,473
Total Reduced Trips				-394	-202	-596	-438	-580	-1,018	-11,304	-443	-400	-843
TOTAL PROPOSED SITE TRIPS (WITH REDUCTIONS)				2,571	1,020	3,591	1,639	2,786	4,425	45,451	2,225	1,405	3,630
Difference (Proposed – Approved)				-910	590	-320	1,093	-564	529	12,406	1,900	1,291	3,191

*The performing arts center will generate off-peak hour trips.

Table 8 shows that the proposed development under phase II will generate approximately 3,591 new weekday morning peak hour trips, approximately 4,425 new weekday afternoon peak hour trips, 3,630 new Saturday peak hour trips and approximately 45,451 new average daily trips with the proposed Kincora development in 2015.

TRIP GENERATION (REZONING APPLICATION FULL BUILD OUT - PHASE III - 2025)

In order to calculate the trip generation for the currently designated keynote employment use and the proposed development program by 2025, the ITE's Trip Generation, 7th Edition publication was used to determine the trips into and out of the project site for the weekday morning and afternoon peak hours as well as for an entire weekday. Average daily volumes for residential developments were estimated based on Loudoun County's trip generation rates.

In addition to the new site trip estimates, trip generation reductions were considered to account for internal synergy, pass-by trips, and mode split reduction, which are listed below:

- *Pass-by trips:* A 25% reduction will be considered on proposed retail trips during the afternoon peak period only to represent traffic pulled from background traffic stream. A 40% reduction was applied to the proposed bank.
- *Internal trips:* According to the VDOT's guidelines for Chapter 527 traffic study, internal capture reduction will be considered for mixed-use land bays.
- *Mode split reduction:* A 10% reduction on proposed office and residential trips will be considered to reflect expected transit usage mode split by future public transportation within the study area. This reduction assumes associated transit commitments from the applicant for implementation.

These reductions were applied to the appropriate site trip assignment. Tables 13 presents the new trips generated by proposed development program in 2025, respectively.

Table 13: Trip Generation (Phase III – 2025)

Land Use	ITE Code	Size	Units	Weekday						Saturday			
				AM Peak Hour			PM Peak Hour			Daily Total	Peak Hour of Generation		
				In	Out	Total	In	Out	Total		In	Out	Total
APPROVED USE													
PD-IP (0.4 FAR)													
Office Park	750	4,000.0	kSF	4,276	528	4,804	693	4,254	4,947	42,090	415	145	560
PROPOSED PLAN - MIXED USE DEVELOPMENT													
Residential Development													
Townhouses/Condos	230	1,400	DU	73	354	427	352	172	524	12,180	243	206	449
Internal Trip Reduction		15%		-11	-54	-65	-53	-26	-79	-1,827	-37	-31	-68
Mode Split Reduction		10%		-8	-35	-43	-36	-17	-53	-1,218	-25	-20	-45
Subtotal Residential Development		1,400	DU	54	265	319	263	129	392	9,135	181	155	336
Office Development													
Hotel	310	720	Rooms	289	184	473	226	199	425	6,071	282	220	502
Office Park	750	4,000.0	kSF	4,276	528	4,804	693	4,254	4,947	42,090	415	145	560
Subtotal Office Development		4,720.0	kSF	4,565	712	5,277	919	4,453	5,372	48,161	697	365	1,062

Kincora- Traffic Impact Study

Land Use	ITE Code	Size	Units	Weekday						Saturday			
				AM Peak Hour			PM Peak Hour			Daily	Peak Hour of Generator		
				In	Out	Total	In	Out	Total		Total	In	Out
Internal Trip Reduction		15%		-45	-9	-54	-17	-34	-51	-1,188	-15	-18	-33
Mode Split Reduction		10%		-457	-71	-528	-92	-446	-538	-4,817	-70	-37	-107
Subtotal Office Development		4,720.0	kSF	4,063	632	4,695	810	3,973	4,783	42,156	612	310	922
Retail Development													
Shopping Center	820	409.0	kSF	223	142	365	762	825	1,587	16,966	1,125	1,038	2163
Health/Fitness Club	492	35.0	kSF	19	24	43	73	69	142	1,153	46	45	91
Drive-In Banks	912	16.0	kSF	111	87	198	366	366	732	3,175	303	291	594
High-Turnover (Sit-Down) Restaurants	932	40.0	kSF	240	221	461	267	170	437	5,086	504	296	800
Subtotal Retail Development		500.0	kSF	593	474	1,067	1,468	1,430	2,898	26,380	1,978	1,670	3,648
Internal Trip Reduction		15%		-9	-2	-11	-9	-19	-28	-639	-15	-17	-32
Pass-by Reduction (Bank)		40%		-45	-35	-80	-147	-146	-293	-1,270	-122	-116	-238
Pass-by Reduction (Retail)		25%		-56	-36	-92	-191	-206	-397	-4,242	-282	-259	-541
Subtotal Retail Development		500.0	kSF	483	401	884	1,121	1,059	2,180	20,229	1,559	1,278	2,837
Stadium													
Baseball Stadium		5,500	Seats	N/A	N/A	N/A	N/A	N/A	N/A	N/A	386	15	401
Civic Use													
Performing Arts Center		375	kSF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Proposed Site Trips (Without Reductions)				5,231	1,540	6,771	2,739	6,055	8,794	86,721	3,304	2,255	5,560
Total Reduced Trips				-631	-242	-873	-545	-894	-1,439	-15,201	-566	-499	-1,064
TOTAL PROPOSED SITE TRIPS (WITH REDUCTIONS)				4,600	1,298	5,898	2,194	5,161	7,355	71,520	2,738	1,756	4,496
Difference (Proposed – Approved)				-2,562	413	-2,149	926	-2,623	-1,697	-5,925	1,971	1,488	3,460

Table 13 shows that the proposed development under phase III will generate approximately 5,898 new weekday morning peak hour trips, approximately 7,355 new weekday afternoon peak hour trips, 4,496 new Saturday peak hour trips and approximately 71,520 new average daily trips with the proposed Kincora development in 2025.

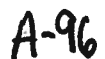


Figure 34A
Site Generated (2025) Traffic Volumes - Office Use - Weekday

April 27, 2009

Existing Conditions Capacity Analysis

Capacity analyses were performed at the intersections contained within the study area during the weekday morning and afternoon peak hours under the existing conditions. Intersection capacity analyses were performed using *Synchro*, version 6.0 based on the latest Highway Capacity Manual (HCM 2000) data and methodology. As agreed upon in the scoping meeting, roadway link and interchange capacity analyses were not performed in this study.

The results of the intersection capacity analyses are presented in Table 1, and are expressed in terms of level of service (LOS) and delay (seconds per vehicle). A description of the different LOS and delay and the detailed analysis worksheets for the existing conditions are included in the Technical Appendix.

Table 1: Existing (2008) Intersection Capacity Analysis

Int. No.	Intersection (Approach/Movement)	Existing Conditions (2008)					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
1	Route 7 and Ashburn Village Blvd./Janelia Farm Blvd.						
	Overall (Signalized)	F	156.3	E	66.4	--	--
	Eastbound	C	27.8	D	40.9	--	--
	Westbound	C	29.8	E	62.2	--	--
	Northbound	F	86.6	F	109.7	--	--
	Southbound	F	817.2	F	167.6	--	--
	Overall Mitigations – Change PM cycle length and adjust AM and PM signal timings	E	55.1	C	33.3	--	--
	Eastbound – Add 4 th through lane	C	28.6	C	26.3	--	--
	Westbound – Add 4 th through lane and allow permitted + overlap right turn movement	C	26.0	C	32.9	--	--
	Northbound – Add 2 nd left turn bay, restripe left thru shared lane to thru lane only, change signal phasing	F	100.0	D	47.5	--	--
	Southbound – Restripe right turn lane to thru/right shared lane and change signal phasing	F	128.1	D	51.8	--	--
2	Route 7 and Lexington Drive/Smith Circle						
	Overall (Signalized)	E	64.1	F	119.0	--	--
	Eastbound	D	52.0	F	99.7	--	--
	Westbound	C	22.2	F	140.3	--	--
	Northbound	F	149.0	B	14.3	--	--
	Southbound	F	93.3	F	84.8	--	--
	Overall Mitigations – Change PM cycle length and adjust AM and PM signal timings	D	51.3	B	52.8	--	--
	Eastbound – Add 4 th through lane and allow permitted + overlap right turn movement	C	21.5	D	53.0	--	--
	Westbound – Add 4 th through lane and allow permitted + overlap right turn movement	D	44.1	D	54.8	--	--
	Northbound	F	127.0	B	14.2	--	--
	Southbound	F	82.0	F	85.0	--	--

Int. No.	Intersection (Approach/Movement)	Existing Conditions (2008)					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
3	Route 7 and Loudoun County Parkway/Presidential Dr.						
	Overall (Signalized)	F	91.0	F	144.4	D	36.0
	Eastbound	F	124.4	D	39.4	C	26.8
	Westbound	C	21.6	F	111.1	D	38.9
	Northbound	D	43.2	F	722.0	F	80.3
	Southbound	F	86.9	F	183.1	F	85.2
	Overall Mitigation - Change PM cycle length and adjust AM and PM signal timings	D	46.1	F	76.7	B	14.6
	Eastbound - Add 4 th through lane	D	54.2	D	53.0	B	18.3
	Westbound - Add 4 th through lane	C	25.5	D	46.0	B	18.3
	Northbound	D	40.3	F	39.4	C	27.7
	Southbound - Allow permitted + overlap right turn movement	F	81.1	F	121.2	D	54.9
4	Route 7 and Richfield Way/George Washington Blvd.						
	Overall (Signalized)	F	120.3	F	237.6	--	--
	Eastbound	F	175.3	F	340.0	--	--
	Westbound	C	24.5	F	176.2	--	--
	Northbound	F	90.9	F	84.0	--	--
	Southbound	F	102.0	F	107.2	--	--
	Overall Mitigation - Change PM cycle length and adjust AM and PM signal timings	C	26.5	F	59.8	--	--
	Eastbound - Add 2 nd left and 4 th through lane and allow permitted + overlap right turn movement	A	5.4	D	54.4	--	--
	Westbound - Add 4 th through lane and allow permitted + overlap right turn movement	B	12.3	D	54.9	--	--
	Northbound	F	5.1	F	83.0	--	--
	Southbound - Add 2 nd left turn bay	F	78.7	F	100.0	--	--
5	Route 7 and City Center Blvd./Countryside Blvd.						
	Overall (Signalized)	D	39.6	E	65.8	--	--
	Eastbound	D	42.7	D	43.9	--	--
	Westbound	C	22.6	F	90.5	--	--
	Northbound	D	42.4	D	40.2	--	--
	Southbound	E	63.7	E	62.3	--	--
	Overall Mitigation - Change AM and PM cycle lengths	C	30.5	D	43.7	--	--
	Eastbound - Add 4 th through lane	C	30.9	D	46.0	--	--
	Westbound - Add 4 th through lane	B	20.0	D	42.7	--	--
	Northbound	C	34.5	C	33.0	--	--
	Southbound	D	51.7	D	51.1	--	--
6	Route 7 and Loudoun Tech Drive/Palisade Parkway						
	Overall (Signalized)	C	25.1	D	51.6	--	--
	Eastbound	B	15.6	C	34.8	--	--
	Westbound	C	22.6	D	50.1	--	--
	Northbound	E	78.1	F	83.8	--	--
	Southbound	E	74.5	E	79.1	--	--
	Overall Mitigation - Change AM and PM cycle lengths	B	19.6	D	42.5	--	--
	Eastbound - Add 4 th through lane	B	11.7	D	54.5	--	--



Int. No.	Intersection (Approach/Movement)	Existing Conditions (2008)					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
	Westbound - Add 4 th through lane.	B	19.3	C	31.8	--	--
	Northbound - Allow permitted + overlap right turn movement.	E	18.7	D	39.4	--	--
	Southbound - Allow permitted + overlap right turn movement.	E	48.1	D	47.6	--	--
7	Algonkian Parkway and Countryside Boulevard						
	Overall (Signalized)	A	7.8	B	10.2	--	--
	Westbound	B	12.5	B	14.8	--	--
	Northbound	B	11.3	B	14.2	--	--
	Southbound	A	3.5	A	4.5	--	--
8	Algonkian Parkway and Winding Road/Sutherland Lane						
	Overall (Two-Way Stop Controlled)	A	7.7	C	21.0	--	--
	Eastbound Approach	C	19.9	F	58.2	--	--
	Westbound Approach	F	51.3	F	317.7	--	--
	Northbound Left Turn	A	1.1	B	10.0	--	--
	Southbound Left Turn	A	8.1	B	10.1	--	--
	Overall Mitigation - Install a traffic signal	B	12.7	A	9.1	--	--
	Eastbound	C	33.9	E	31.8	--	--
	Westbound	D	35.3	D	35.7	--	--
	Northbound	A	5.0	A	5.4	--	--
	Southbound	A	7.0	A	6.3	--	--
9	Route 28 and Dulles Center Boulevard						
	Overall (All Free-Flow Movements)	N/A	N/A	N/A	N/A	N/A	N/A
10	Ashburn Village Boulevard and Gloucester Parkway						
	Overall (Signalized)	C	23.4	C	27.5	--	--
	Eastbound	C	22.1	B	16.7	--	--
	Westbound	C	23.4	C	23.8	--	--
	Northbound	B	18.9	C	31.3	--	--
	Southbound	C	30.7	C	29.9	--	--
	Overall Mitigation - Adjust AM and PM signal timings	C	22.9	C	22.6	--	--
	Eastbound	C	21.8	B	15.6	--	--
	Westbound	C	22.9	C	22.9	--	--
	Northbound - Add 2 nd left turn bay.	B	18.9	C	22.6	--	--
	Southbound	C	29.0	C	25.6	--	--
11	Loudoun County Parkway and Smith Switch Road						
	Overall (Two-Way Stop Controlled)	N/A	N/A	N/A	N/A	N/A	N/A
	Eastbound Approach	C	22.1	E	39.8	B	10.3
	Northbound Approach	A	0.7	A	0.5	A	1.2
	Southbound Approach	A	0.0	A	0.0	A	0.0
12	Route 28 and Nokes Boulevard						
	Overall (Signalized)	B	10.8	F	88.0	B	17.7
	Westbound	B	17.5	D	38.0	D	44.1
	Northbound	A	5.5	F	109.4	A	8.3
	Southbound	B	12.9	E	67.7	B	11.6
	Overall Mitigation - Adjust PM signal timings	B	13.2	F	102.3	C	30.0
	Westbound	B	17.5	F	442.6	D	36.6
	Northbound	B	13.0	D	52.6	C	25.3
	Southbound	B	12.9	D	53.1	C	34.0

Int. No.	Intersection (Approach/Movement)	Existing Conditions (2008)					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
13	Nokes Boulevard and Atlantic Boulevard						
	Overall (Signalized)	C	22.1	C	26.4	--	--
	Eastbound	B	13.3	C	25.9	--	--
	Westbound	C	20.2	C	27.1	--	--
	Northbound	C	32.4	C	28.4	--	--
	Southbound	C	28.2	C	21.1	--	--
14	Nokes Boulevard and Cascade Pkwy./Potomac View Rd.						
	Overall (Signalized)	C	27.0	D	35.9	--	--
	Eastbound	D	38.8	D	46.9	--	--
	Westbound	D	40.5	E	61.2	--	--
	Northbound	C	21.7	C	29.1	--	--
	Southbound	C	23.8	C	28.4	--	--
	Overall Mitigation - Adjust PM signal timings	C	27.0	C	33.6	--	--
	Eastbound	D	38.8	D	47.8	--	--
	Westbound	D	40.5	D	41.7	--	--
	Northbound	C	21.7	C	29.2	--	--
	Southbound	C	23.8	C	27.4	--	--
15	Route 28 and Severn Way						
	Overall (Signalized)	E	61.7	F	128.3	--	--
	Eastbound	D	38.8	D	49.7	--	--
	Westbound	D	36.3	E	66.2	--	--
	Northbound	D	53.1	F	197.7	--	--
	Southbound	E	72.1	B	12.5	--	--
	Overall Mitigation - Adjust AM and PM signal timings	B	17.2	F	70.9	--	--
	Eastbound	D	52.0		21.1	--	--
	Westbound				49.4	--	--
	Northbound - Add 2nd left turn lane	A	3.2	D	81.8	--	--
	Southbound	B	11.8	B	10.1	--	--
16	Potomac View Road and Woodland Road						
	Overall (Signalized)	A	8.1	B	12.6	--	--
	Eastbound	C	25.5	C	23.4	--	--
	Northbound	A	4.1	A	8.1	--	--
	Southbound	A	9.6	B	14.5	--	--
17	Route 28 and Steeplechase Drive						
	Overall (Signalized)	D	41.1	E	61.0	--	--
	Eastbound	D	45.6	D	54.3	--	--
	Westbound	D	44.8	F	204.0	--	--
	Northbound	C	20.8	F	83.7	--	--
	Southbound	E	56.4	A	8.0	--	--
	Overall Mitigation - Adjust AM and PM signal timings	C	28.1	D	54.2	--	--
	Eastbound - Change signal phasing	B	46.3	E	61.9	--	--
	Westbound - Restripe shared left/through to through only; change signal phasing	D	51.4	F	328.0	--	--
	Northbound - Allow permitted + overlap right turn movement	C	20.4	D	52.8	--	--
	Southbound	D	33.1	B	10.9	--	--
18	Farmwell Road and Ashburn Village Boulevard						
	Overall (Signalized)	D	47.8	F	131.3	--	--
	Eastbound	D	40.9	D	46.0	--	--

Int. No.	Intersection (Approach/Movement)	Existing Conditions (2008)					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
	Westbound	C	33.4	F	143.9	--	--
	Northbound	D	54.5	D	52.8	--	--
	Southbound	E	57.2	F	230.4	--	--
	Overall Mitigation - Adjust AM and PM signal timings	C	34.5	D	46.9	--	--
	Eastbound - Add 3 rd through lane	C	30.9	D	38.2	--	--
	Westbound - Add 3 rd through lane and allow free-flow right turn movement	B	18.7	D	48.5	--	--
	Northbound - Allow permitted + overlap right turn movement	D	48.7	D	52.3	--	--
	Southbound - Add 2 nd through lane and allow permitted + overlap right turn movement	D	39.9	D	54.0	--	--
19	Farmwell Road and Waxpool Road/Smith Switch Road						
	Overall (Signalized)	E	61.7	E	56.5	--	--
	Eastbound	C	26.6	B	16.6	--	--
	Westbound	E	62.5	C	31.1	--	--
	Northbound	F	183.7	F	218.4	--	--
	Southbound	F	91.7	F	113.8	--	--
	Overall Mitigation - Change AM and PM cycle lengths	D	29.7	C	27.3	--	--
	Eastbound - Add 3 rd through lane	C	24.4	C	33.0	--	--
	Westbound - Add 3 rd through lane	C	23.8	C	24.1	--	--
	Northbound - Allow free-flow right turn movement	B	12.2	B	16.4	--	--
	Southbound	D	43.4	D	52.2	--	--
20	Waxpool Road and Loudoun County Parkway						
	Overall (Signalized)	F	339.8	F	178.6	D	40.0
	Eastbound	D	41.3	C	31.4	D	41.1
	Westbound	E	76.9	F	192.0	C	30.5
	Northbound	F	927.8	F	338.5	E	58.0
	Southbound	F	433.7	F	179.7	D	53.6
	Overall Mitigation - Change PM cycle length and adjust AM and PM signal timings	D	36.0	D	38.3	D	22.4
	Eastbound - Add 3 rd through lane	D	47.4	D	43.9	B	19.9
	Westbound	C	28.0	D	38.0	C	20.7
	Northbound - Allow free flow right turn movement	C	22.3	C	31.5	B	13.2
	Southbound - Add 2 nd left turn bay and restripe left thru shared lane to thru lane only	D	52.8	D	47.9	D	45.9
21	Waxpool Road and Pacific Boulevard						
	Overall (Signalized)	F	85.3	E	78.1	D	42.8
	Eastbound	F	138.7	C	31.8	E	69.2
	Westbound	C	28.6	D	44.6	B	17.7
	Northbound	E	61.2	F	284.8	E	72.0
	Southbound	E	62.9	E	79.6	D	37.7
	Overall Mitigation - Change AM and PM cycle lengths	D	36.0	D	41.4	D	38.4
	Eastbound - Add 4 th through lane	D	46.8	C	28.6	D	53.6
	Westbound	C	23.0	D	48.7	B	14.0
	Northbound - Convert right turn to free flow	B	16.8	D	35.7	D	40.3



Int. No.	Intersection (Approach/Movement)	Existing Conditions (2008)					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
	Southbound	D	47.4	D	51.6	D	50.3
22	Church Road and Davis Drive/Ruritan Circle						
	Overall (Signalized)	F	595.8	F	665.9	--	--
	Eastbound	F	1527.2	F	1441.8	--	--
	Westbound	E	57.5	C	33.1	--	--
	Northbound	D	38.0	F	81.9	--	--
	Southbound	D	38.3	D	39.4	--	--
	Overall Mitigation - Adjust AM and PM signal timings	C	28.5	D	36.2	--	--
	Eastbound - Add 2 nd through lane	C	26.2	D	43.7	--	--
	Westbound - Add 2 nd through lane	B	14.1	C	24.3	--	--
	Northbound - Allow permitted + overlap right turn movement	C	29.0	D	42.7	--	--
	Southbound	D	36.6	D	48.3	--	--
23	Church Road and Cascades Parkway						
	Overall (Signalized)	B	17.1	D	45.9	--	--
	Eastbound	B	15.0	D	54.8	--	--
	Westbound	B	14.4	C	29.7	--	--
	Southbound	C	21.7	D	51.0	--	--

Note: N/A means not applicable.

According to the Loudoun County's Facilities Standards Manual (FSM), it is desirable to achieve an overall and per approach level of service (LOS) D or better at each intersection. The results presented in Table 3 show that most of the study intersections are currently operating at unacceptable conditions. The following mitigation measures would be required to meet the desired LOS criteria set forth by the County under the existing conditions:

- *Intersection of Route 7 with Ashburn Village Boulevard/Janelia Farm Boulevard:*
 - Add fourth eastbound and westbound through lane.
 - Add second northbound left turn bay.
 - Restripe northbound left/through shared lane to through lane only.
 - Restripe southbound right turn lane to through/right shared lane.
 - Allow permitted plus overlap right turn movement in the westbound approach.
 - Adjust signal phasing in the northbound and southbound approaches.
 - Change PM cycle length and adjust AM and PM signal timings.
- *Intersection of Route 7 with Lexington Drive/Smith Circle:*
 - Add fourth eastbound and westbound through lane.
 - Allow permitted plus overlap right turn movement in the eastbound and westbound approaches.

- Change PM cycle length and adjust AM and PM signal timings.
- *Intersection of Route 7 with Loudoun County Parkway/Presidential Drive:*
 - Add fourth eastbound and westbound through lane.
 - Allow permitted plus overlap right turn movement in the southbound approach.
 - Change PM cycle length and adjust AM and PM signal timings.
- *Intersection of Route 7 with Richfield Way/George Washington Boulevard:*
 - Add fourth eastbound and westbound through lane.
 - Add second southbound left turn bay.
 - Restripe southbound left/through/right shared lane to right/through shared lane.
 - Add second eastbound left turn bay.
 - Allow permitted plus overlap right turn movement in the eastbound and westbound approaches.
 - Change PM cycle length and adjust AM and PM signal timings.
- *Intersection of Route 7 with City Center Boulevard/Countryside Boulevard:*
 - Add fourth eastbound and westbound through lane.
 - Change AM and PM cycle lengths and signal timings.
- *Intersection of Route 7 with Loudoun Tech Drive/Palisade Parkway:*
 - Add fourth eastbound and westbound through lane.
 - Allow permitted plus overlap right turn movement in the northbound and southbound approaches.
 - Change AM and PM cycle lengths and signal timings.
- *Intersection of Algonkian Parkway with Winding Road/Sutherlin Lane:*
 - Install a traffic signal.
- *Intersection of Ashburn Village Boulevard with Gloucester Parkway:*
 - Add second northbound left turn bay.
 - Adjust AM and PM signal timings.
- *Intersection of Route 28 with Nokes Boulevard:*
 - Adjust PM signal timings.
- *Intersection of Cascades Parkway with Nokes Boulevard:*
 - Adjust PM cycle length signal timings.

- *Intersection of Route 28 with Severn Way:*
 - Add second northbound left turn bay.
 - Adjust AM and PM signal timings.
- *Intersection of Route 28 with Steeplechase Drive:*
 - Adjust signal phasing in the eastbound and westbound approaches.
 - Restripe westbound left/through shared lane to through lane only.
 - Adjust AM and PM signal timings.
- *Intersection of Farmwell Road with Ashburn Village Boulevard:*
 - Add third eastbound and westbound through lane.
 - Add second southbound through lane.
 - Allow free-flow right turn movement in the westbound approach.
 - Allow permitted plus overlap right turn movement in the northbound and southbound approaches.
 - Adjust AM and PM signal timings.
- *Intersection of Farmwell Road with Smith Switch Road/Waxpool Road:*
 - Add third eastbound and westbound through lane.
 - Allow free-flow right turn movement in the northbound approach.
 - Change AM and PM cycle lengths and signal timings.
- *Intersection of Waxpool Road with Loudoun County Parkway:*
 - Add third eastbound through lane.
 - Add second southbound left turn bay.
 - Restripe southbound left/through shared lane to through lane only.
 - Allow free-flow right turn movement in the northbound approach.
 - Change AM and PM cycle lengths and signal timings.
- *Intersection of Waxpool Road with Pacific Boulevard:*
 - Add fourth eastbound through lane.
 - Convert northbound right turn to free flow
 - Change AM and PM cycle lengths and signal timings.
- *Intersection of Church Road with Davis Drive/Ruritan Circle:*
 - Add second eastbound and westbound through lane.

- Allow permitted plus overlap right turn movement in the northbound approach.
- Adjust AM and PM signal timings.

It should be noted that the mitigation measures recommended at most of the intersections on Route 7 will not meet the overall and per approach LOS criteria set forth by the County due to the high volume demand on Route 7, existing proffers, and public sector funding resources on this major arterial. However, all major street approaches on Route 7 will operate at acceptable levels of service with the recommended improvements listed above, but some of the minor streets will operate at unacceptable conditions. **Figures 6A and 6B** illustrate graphically the intersection capacity analysis results. **Figure 7** shows the recommended improvements under the existing conditions.

Table 4: Future Conditions with Development (Rezoning Application - Phase I - 2011) Intersection Capacity Analysis

Int. No.	Intersection (Approach/Movement)	Future Conditions (2011) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
1	Route 7 and Ashburn Village Blvd./Janelia Farm Blvd.						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
2	Route 7 and Lexington Drive/Smith Circle						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
3	Route 7 and Loudoun County Parkway/Presidential Dr.						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
4	Route 7 and Richfield Way/George Washington Blvd.						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
5	Route 7 and City Center Blvd./Countryside Blvd.						
	Overall (Signalized)	C	30.2	D	37.6	--	--
	Eastbound	C	30.4	D	37.2	--	--
	Westbound	C	23.7	D	35.4	--	--
	Northbound	C	30.4	C	34.7	--	--
	Southbound	D	51.4	D	54.4	--	--
6	Route 7 and Loudoun Tech Drive/Palisade Parkway						
	Overall (Signalized)	C	22.2	D	40.0	--	--
	Eastbound	C	20.3	D	37.7	--	--
	Westbound	B	15.9	D	41.4	--	--
	Northbound	D	54.3	D	37.6	--	--
	Southbound	D	52.3	D	46.6	--	--
7	Algonkian Parkway and Countryside Boulevard						
	Overall (Signalized)	A	6.5	A	8.9	--	--
	Westbound	B	13.1	B	12.9	--	--
	Northbound	A	9.3	B	12.5	--	--
	Southbound	A	2.6	A	3.6	--	--
8	Algonkian Parkway and Winding Road/Sutherland Lane						
	Overall (Signalized)	B	12.5	A	7.8	--	--
	Eastbound	C	34.3	C	32.4	--	--
	Westbound	D	35.6	D	36.0	--	--
	Northbound	A	4.7	A	4.6	--	--
	Southbound	A	6.8	A	5.6	--	--
9	Route 28 and Dulles Center Boulevard						
	Overall (All Free-Flow Movements)	N/A	N/A	N/A	N/A	N/A	N/A
10	Ashburn Village Boulevard and Gloucester Parkway						
	Overall (Signalized)	C	22.0	C	23.3	--	--
	Eastbound	B	18.3	B	15.9	--	--
	Westbound	C	23.0	C	20.6	--	--
	Northbound	B	20.0	C	26.1	--	--
	Southbound	C	28.1	C	25.5	--	--
11	Loudoun County Parkway and Smith Switch Road						
	Overall (Signalized)	A	6.5	C	26.3	A	2.1
	Eastbound	D	46.2	D	54.5	D	53.0
	Northbound	A	4.6	D	38.4	A	1.6
	Southbound	A	6.1	A	7.1	A	1.4



Int. No.	Intersection (Approach/Movement)	Future Conditions (2011) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
12	Route 28 and Nokes Boulevard						
	Overall (All Free-Flow Movements)	N/A	N/A	N/A	N/A	N/A	N/A
13	Nokes Boulevard and Atlantic Boulevard						
	Overall (Signalized)	C	32.9	C	30.3	--	--
	Eastbound	C	22.2	C	32.8	--	--
	Westbound	C	28.7	D	42.7	--	--
	Northbound	D	50.8	C	26.4	--	--
	Southbound	D	37.0	B	17.8	--	--
14	Nokes Boulevard and Cascade Pkwy./Potomac View Rd.						
	Overall (Signalized)	C	25.2	D	35.2	--	--
	Eastbound	D	40.9	D	47.6	--	--
	Westbound	D	36.9	D	49.1	--	--
	Northbound	B	18.9	C	28.8	--	--
	Southbound	C	21.9	C	28.8	--	--
15	Route 28 and Severn Way						
	Overall (Intersection Removed)	N/A	N/A	N/A	N/A	N/A	N/A
16	Potomac View Road and Woodland Road						
	Overall (Signalized)	A	7.4	B	15.4	--	--
	Eastbound	C	23.0	C	28.8	--	--
	Northbound	A	3.7	A	9.5	--	--
	Southbound	A	9.6	B	19.5	--	--
17	Route 28 and Steeplechase Drive						
	Overall (Intersection Removed)	N/A	N/A	N/A	N/A	N/A	N/A
18	Farmwell Road and Ashburn Village Boulevard						
	Overall (Signalized)	C	34.8	E	57.0	--	--
	Eastbound	D	36.7	D	37.8	--	--
	Westbound	B	16.9	E	56.7	--	--
	Northbound	D	49.4	D	49.2	--	--
	Southbound	D	39.0	F	81.0	--	--
	Overall Mitigation - Change AM and PM signal timing and cycle lengths	G	34.9	D	52.1	--	--
	Eastbound	D	36.0	D	43.9	--	--
	Westbound	B	16.7	D	54.1	--	--
	Northbound	D	49.5	D	50.6	--	--
	Southbound	D	40.1	D	50.9	--	--
19	Farmwell Road and Waxpool Road/Smith Switch Road						
	Overall (Signalized)	C	22.6	C	31.5	--	--
	Eastbound	C	23.0	D	41.3	--	--
	Westbound	B	19.5	C	27.9	--	--
	Northbound	C	21.1	B	15.0	--	--
	Southbound	D	43.1	D	50.0	--	--
20	Waxpool Road and Loudoun County Parkway						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
21	Waxpool Road and Pacific Boulevard						
	Overall (Signalized)	E	77.1	D	49.9	F	139.6
	Eastbound	F	120.5	F	99.3	F	312.2
	Westbound	C	24.0	C	30.1	C	20.6
	Northbound	D	43.2	C	28.8	D	50.4
	Southbound	D	39.8	C	25.1	C	21.2

Int. No.	Intersection (Approach/Movement)	Future Conditions (2011) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
	Overall Mitigation - Change AM and PM signal timing and cycle lengths	C	30.8	D	40.9	C	34.7
	Eastbound	C	31.3	C	28.6	D	36.6
	Westbound	C	26.6	D	48.9	D	38.0
	Northbound	D	43.2	D	41.5	D	49.6
	Southbound	D	37.9	C	33.4	C	25.6
22	Church Road and Davis Drive/Ruritan Circle						
	Overall (Signalized)	C	22.5	D	39.3	--	--
	Eastbound	C	33.0	D	54.2	--	--
	Westbound	A	9.4	B	14.7	--	--
	Northbound	C	29.3	D	41.7	--	--
	Southbound	D	37.4	D	48.3	--	--
23	Church Road and Cascades Parkway						
	Overall (Signalized)	B	17.8	D	38.1	--	--
	Eastbound	B	15.7	D	35.2	--	--
	Westbound	B	15.9	D	43.3	--	--
	Southbound	C	22.3	D	36.9	--	--
24	Loudoun County Parkway and Russell Branch Parkway						
	Overall (Signalized)	B	16.6	C	20.8	--	--
	Eastbound	C	28.7	C	29.1	--	--
	Westbound	C	27.2	C	25.3	--	--
	Northbound	B	15.7	B	19.4	--	--
	Southbound	B	15.0	B	18.5	--	--
26	Gloucester Parkway and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	F	259.8	F	61.0	F	211.4
	Northbound	A	0.0	A	0.0	A	0.0
	Southbound	A	7.4	C	17.1	A	9.7
	Overall Mitigation - Install Signal	C	21.5	B	13.3	B	16.3
	Westbound	C	28.2	A	8.9	C	20.9
	Northbound	C	23.5	C	21.6	C	22.5
	Southbound - Add left turn lane	A	4.7	B	12.9	A	7.0
34	Site Driveway #1 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Eastbound	A	9.5	D	27.1	B	13.3
	Northbound	A	9.6	A	8.2	B	12.7
	Southbound	A	0.0	A	0.0	A	0.0
33	Site Driveway #2 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Eastbound	B	11.0	F	496.3	C	15.7
	Northbound	A	9.3	B	10.6	A	6.3
	Southbound	A	0.0	A	0.0	A	0.0
	Overall Mitigation - Add Signal	A	2.2	D	40.5	A	2.7
	Eastbound - Add right turn lane	A	6.3	D	46.8	B	17.1
	Northbound - Add left turn lane	A	0.4	C	26.8	A	0.6
	Southbound	A	8.3	D	48.2	A	4.1
36	Gloucester Parkway and Route 28 SB Off-Ramp						
	Overall (Signalized)	A	5.5	A	2.1	A	4.5
	Eastbound	A	0.0	A	0.0	A	0.0

Int. No.	Intersection (Approach/Movement)	Future Conditions (2011) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
	Westbound	B	11.2	B	11.1	B	11.1
	Southbound	A	5.4	A	4.3	A	4.9

Note: N/A means not applicable.

As mentioned before, it is desirable to achieve an overall and per approach LOS D or better at each intersection. Assuming that the mitigation measures recommended in the future background 2011 conditions were in place, the results presented in **Table 4** show that some of the study intersections would operate at unacceptable levels of service under the total future 2011 conditions with this planned interchange. The following improvements would be required to meet the desired LOS criteria set forth by the County under this scenario:

- *Intersection of Farmwell Road with Ashburn Village Boulevard:*
 - Adjust AM and PM signal timings and cycle lengths.
- *Intersection of Waxpool Road with Pacific Boulevard:*
 - Adjust AM and PM signal timings and cycle lengths.
- *Intersection of Gloucester Parkway with Pacific Boulevard:*
 - Analyzed Gloucester Parkway as a four-lane, median divided, rural highway with left and right turn lanes provided at this intersection.
 - Analyzed Pacific Boulevard as a two-lane, local access, rural road.
 - Install a traffic signal.
 - Add southbound left turn bay.
- *Intersection of Pacific Boulevard with Future Site Drive #2:*
 - Analyzed Pacific Boulevard as a two-lane, local access, rural road.
 - Add Traffic Signal.
 - Add northbound left turn lane.
 - Add eastbound right turn lane.

As mentioned earlier in the report, no analyses were performed at the planned and recommended grade-separated interchanges. **Figures 13A and B** illustrate graphically the intersection capacity analysis results. **Figure 14** shows the recommended improvements under the total future 2011 conditions.

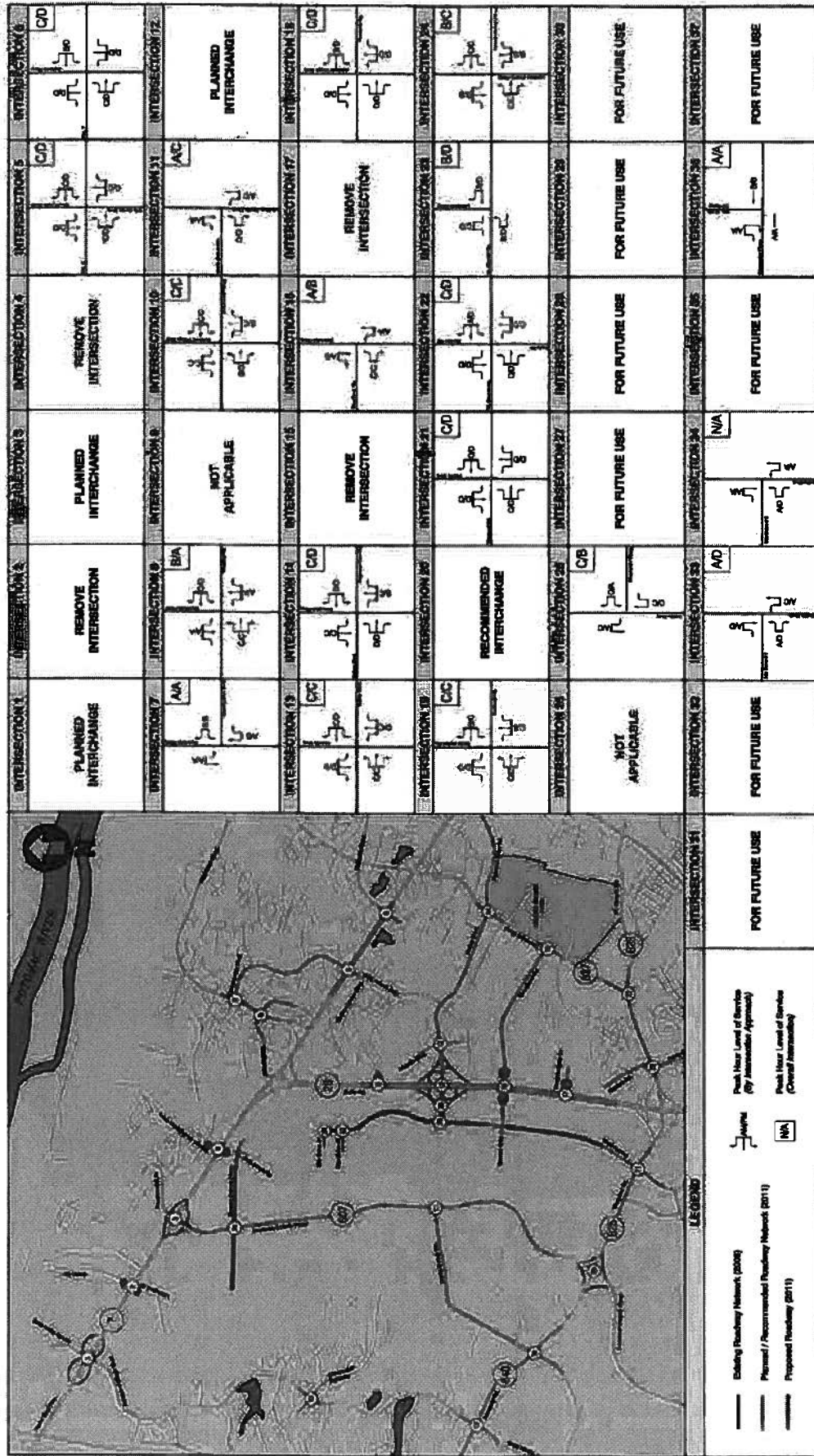


Figure 13A
Future Conditions with Development (2011) Peak Hour Levels of Service - Weekday

**Table 9: Total Future (2015) Intersection Capacity Analysis (Rezoning Application – Phase II)**

Int. No.	Intersection (Approach/Movement)	Future Conditions (2015) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
1	Route 7 and Ashburn Village Blvd./Janelia Farm Blvd.						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
2	Route 7 and Lexington Drive/Smith Circle						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
3	Route 7 and Loudoun County Parkway/Presidential Dr.						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
4	Route 7 and Richfield Way/George Washington Blvd.						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
5	Route 7 and City Center Blvd./Countryside Blvd.						
	Overall (Signalized)	C	34.8	D	44.1	--	--
	Eastbound	D	36.6	D	47.9	--	--
	Westbound	C	28.8	D	40.0	--	--
	Northbound	C	30.4	D	39.0	--	--
	Southbound	D	50.8	D	53.4	--	--
6	Route 7 and Loudoun Tech Drive/Palisade Parkway						
	Overall (Signalized)	C	22.3	C	33.0	--	--
	Eastbound	C	21.5	C	29.1	--	--
	Westbound	B	17.9	C	30.8	--	--
	Northbound	D	48.3	D	45.7	--	--
	Southbound	D	44.8	D	51.5	--	--
7	Algonkian Parkway and Countryside Boulevard						
	Overall (Signalized)	A	6.5	A	9.0	--	--
	Westbound	B	13.1	B	13.3	--	--
	Northbound	A	9.3	B	12.7	--	--
	Southbound	A	2.6	A	3.7	--	--
8	Algonkian Parkway and Winding Road/Sutherland Lane						
	Overall (Signalized)	B	12.4	A	7.8	--	--
	Eastbound	C	34.3	C	32.4	--	--
	Westbound	D	35.6	D	36.0	--	--
	Northbound	A	4.8	A	4.7	--	--
	Southbound	A	6.9	A	5.6	--	--
9	Route 28 and Dulles Center Boulevard						
	Overall (All Free-Flow Movements)	N/A	N/A	N/A	N/A	N/A	N/A
10	Ashburn Village Boulevard and Gloucester Parkway						
	Overall (Signalized)	C	27.7	C	34.3	--	--
	Eastbound	C	24.0	C	21.1	--	--
	Westbound	C	29.2	C	29.3	--	--
	Northbound	C	27.3	D	48.3	--	--
	Southbound	C	32.2	C	27.8	--	--
11	Loudoun County Parkway and Smith Switch Road						
	Overall (Signalized)	A	8.6	C	21.7	A	5.4
	Eastbound	C	31.9	D	47.7	C	20.4
	Northbound	A	9.0	C	34.1	A	4.6
	Southbound	A	5.4	A	6.3	A	4.3
12	Route 28 and Nokes Boulevard						
	Overall (All Free-Flow Movements)	N/A	N/A	N/A	N/A	N/A	N/A

Int. No.	Intersection (Approach/Movement)	Future Conditions (2015) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
13	Nokes Boulevard and Atlantic Boulevard						
	Overall (Signalized)	C	33.7	C	32.1	--	--
	Eastbound	C	26.7	C	37.8	--	--
	Westbound	C	29.2	D	47.3	--	--
	Northbound	D	51.5	C	26.5	--	--
	Southbound	C	34.8	B	15.6	--	--
14	Nokes Boulevard and Cascade Pkwy./Potomac View Rd.						
	Overall (Signalized)	C	27.6	D	36.5	--	--
	Eastbound	D	39.2	D	40.3	--	--
	Westbound	D	37.6	D	49.9	--	--
	Northbound	C	21.0	C	32.3	--	--
	Southbound	C	24.2	C	30.3	--	--
15	Route 28 and Severn Way						
	Overall (Intersection Removed)	N/A	N/A	N/A	N/A	N/A	N/A
16	Potomac View Road and Woodland Road						
	Overall (Signalized)	A	7.9	B	16.1	--	--
	Eastbound	C	22.4	C	30.3	--	--
	Northbound	A	3.8	B	10.0	--	--
	Southbound	B	10.9	C	20.2	--	--
17	Route 28 and Steeplechase Drive						
	Overall (Intersection Removed)	N/A	N/A	N/A	N/A	N/A	N/A
18	Farmwell Road and Ashburn Village Boulevard						
	Overall (Signalized)	D	51.3	E	73.0	--	--
	Eastbound	C	30.1	D	37.6	--	--
	Westbound	B	17.5	E	70.9	--	--
	Northbound	D	52.6	D	53.0	--	--
	Southbound	F	96.4	F	118.1	--	--
	Overall Mitigation - Change signal timing and cycle length	D	35.8	D	54.4	--	--
	Eastbound	D	36.3	D	52.9	--	--
	Westbound	B	16.4	D	54.7	--	--
	Northbound	D	50.1	D	55.0	--	--
	Southbound	D	44.9	D	54.7	--	--
19	Farmwell Road and Waxpool Road/Smith Switch Road						
	Overall (Signalized)	C	26.7	D	38.2	--	--
	Eastbound	C	29.3	D	51.5	--	--
	Westbound	C	20.3	C	33.0	--	--
	Northbound	C	24.8	B	15.6	--	--
	Southbound	D	51.1	D	51.3	--	--
20	Waxpool Road and Loudoun County Parkway						
	Intersection converted into a grade-separated interchange in the Future Background (2015) Conditions						
21	Waxpool Road and Pacific Boulevard						
	Overall (Signalized)	E	70.6	F	100.9	F	81.6
	Eastbound	F	105.5	F	176.3	F	138.2
	Westbound	C	29.9	E	63.8	D	49.2
	Northbound	E	55.1	F	91.4	E	58.4
	Southbound	C	25.0	D	46.7	C	25.9
	Overall Mitigation - Adjust signal timing and cycle length	D	43.7	E	71.3	D	46.0

Int. No.	Intersection (Approach/Movement)	Future Conditions (2015) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
	Eastbound - Add 3 rd left turn lane and convert right turn lane to free flow	D	47.7	D	45.2	D	50.7
	Westbound	C	37.0	D	110.0	C	38.6
	Northbound	D	53.5	D	48.4	D	53.1
	Southbound	D	39.9	D	42.8	D	50.6
22	Church Road and Davis Drive/Ruritan Circle						
	Overall (Signalized)	C	27.5	D	43.5	--	--
	Eastbound	D	43.9	E	59.1	--	--
	Westbound	A	9.7	B	15.7	--	--
	Northbound	C	29.3	D	50.7	--	--
	Southbound	D	37.4	D	50.9	--	--
	Overall Mitigation - Remove split phasing, Change AM and PM signal timing and cycle length	B	16.7	C	32.6	--	--
	Eastbound	D	22.6	D	43.3	--	--
	Westbound	A	7.3	B	12.9	--	--
	Northbound	C	32.6	D	39.9	--	--
	Southbound	D	34.3	D	34.3	--	--
23	Church Road and Cascades Parkway						
	Overall (Signalized)	B	19.1	D	42.3	--	--
	Eastbound	B	16.6	D	38.2	--	--
	Westbound	B	17.4	D	51.1	--	--
	Southbound	C	24.2	D	39.1	--	--
24	Loudoun County Parkway and Russell Branch Parkway						
	Overall (Signalized)	C	34.1	D	45.8	--	--
	Eastbound	C	25.9	C	22.9	--	--
	Westbound	A	2.2	A	4.0	--	--
	Northbound	D	36.1	C	28.3	--	--
	Southbound	D	37.6	F	88.7	--	--
	Overall Mitigation - Change signal timing and cycle length	C	32.9	C	38.2	--	--
	Eastbound	C	29.9	D	29.4	--	--
	Westbound	A	2.2	A	4.6	--	--
	Northbound	D	38.7	B	43.4	--	--
	Southbound	C	32.3	C	31.5	--	--
25	Russel Branch Parkway/Pacific Boulevard and Richfield Way/George Washington Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	--	--
	Eastbound	A	0.0	A	0.0	--	--
	Westbound	A	0.0	A	0.0	--	--
	Northbound	C	18.6	C	17.8	--	--
	Southbound	A	0.0	A	0.0	--	--
26	Gloucester Parkway and Pacific Boulevard						
	Overall (Signalized)	F	126.9	F	124.6	F	660.2
	Westbound	F	302.6	E	66.1	F	316.1
	Northbound	C	31.3	D	43.4	D	37.7
	Southbound	C	28.3	F	182.2	F	1508.7
	Overall Mitigation	C	27.7	C	24.5	C	23.9
	Westbound	D	50.7	B	16.7	C	28.8
	Northbound - Add 2 nd through lane and right turn lane	D	22.3	D	41.8	C	20.2
	Southbound - Add 2 nd through lane	A	6.0	B	18.8	C	24.7

Int. No.	Intersection (Approach/Movement)	Future Conditions (2015) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
27	Site Driveway #9 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	C	22.6	D	34.9	E	35.1
	Overall Mitigation - Add 2nd Northbound and Southbound Through lanes.	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	B	13.1	B	14.5	B	13.0
28	Site Driveway #10 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	F	64.7	F	803.4	F	1031.6
	Northbound	A	0.0	A	0.0	A	0.0
	Southbound	A	1.3	A	4.1	A	4.9
	Overall Mitigation - Install signal	A	3.7	A	7.1	A	6.5
	Westbound	C	32.1	C	22.9	C	20.9
	Northbound - Add 2 nd through lane	A	2.9	A	4.9	A	5.7
	Southbound - Add 2 nd through lane	A	2.3	A	7.2	A	5.1
29	Site Driveway #8 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	F	512.5	F	103.9	F	**
	Overall Mitigation - Add 2nd Northbound and Southbound Through lanes.	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	C	15.7	B	12.4	B	14.9
30	Site Driveway #7 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	E	43.2	D	25.6	E	44.6
	Overall Mitigation - Add 2nd Northbound and Southbound Through lanes.	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	C	18.1	B	14.5	C	18.5
31	Site Driveway #6 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Eastbound	C	17.4	F	*	D	34.5
	Westbound	E	42.5	C	24.9	E	42.4
	Overall Mitigation - Add 2nd Northbound and Southbound Through lanes.	N/A	N/A	N/A	N/A	N/A	N/A
	Eastbound	B	12.9			C	16.1
	Westbound	B	18.0	B	14.2	C	17.9
32	Site Driveway #5 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Eastbound	F	68.1	F	*	F	575.1
	Overall Mitigation - Add 2nd Northbound and Southbound Through lanes.	N/A	N/A	N/A	N/A	N/A	N/A
	Eastbound	B	11.1	G	24.5	B	13.0
33	Site Driveway #2 and Pacific Boulevard						
	Overall (Signalized)	C	30.4	F	123.1	C	26.4
	Eastbound	C	27.7	C	30.7	C	33.8
	Northbound	C	31.0	B	18.2	C	32.4
	Southbound	C	29.9	F	253.1	B	14.6
	Overall Mitigation	A	9.0	B	19.6	A	8.2
	Eastbound	B	15.3	C	30.6	B	16.2
	Northbound - Add 2 nd through lane	A	5.0	B	11.6	A	4.1
	Southbound - Add 2 nd through lane	B	14.9	C	22.8	B	12.7

Int. No.	Intersection (Approach/Movement)	Future Conditions (2015) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
34	Site Driveway #1 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Eastbound	F	**	F	**	F	**
	Northbound	C	19.5	C	18.2	F	57.9
	Southbound	A	0.0	A	0.0	A	0.0
	Overall Mitigation - Install signal	B	13.3	D	45.5	D	36.1
	Eastbound	C	20.5	D	41.6	D	35.4
	Northbound - Add 2 nd through lane and a left turn lane	B	10.7	D	46.1	D	43.9
	Southbound - Add 2 nd through lane	B	15.6	D	45.9	C	24.1
35	Site Driveway #4 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Eastbound	F	754.0	F	**	F	638.8
	Northbound	B	11.3	A	9.1	A	9.2
	Southbound	A	0.0	A	0.0	A	0.0
	Overall Mitigation - Install signal	B	11.8	C	21.9	B	12.4
	Eastbound	B	19.5	D	36.4	C	20.5
	Northbound - Add 2 nd through lane and left turn lane	A	6.8	B	11.9	A	5.8
	Southbound - Add 2 nd through lane	B	15.8	C	28.1	B	17.1
36	Gloucester Parkway and Route 28 SB Off-Ramp						
	Overall (Unsignalized)	A	6.3	A	2.9	A	4.3
	Eastbound	A	0.0	A	0.0	A	0.0
	Westbound	B	11.3	B	11.2	B	11.2
	Southbound	A	6.4	A	5.0	A	5.1
37	Site Driveway #3 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Eastbound	F	255.4	F	687.6	E	36.9
	Northbound	B	11.1	A	6.0	A	5.9
	Southbound	A	0.0	A	0.0	A	0.0
	Overall Mitigation - Install signal	B	12.3	B	17.0	A	9.6
	Eastbound	B	19.3	C	25.2	B	17.9
	Northbound - Add 2 nd through lane and left turn lane	A	7.1	A	9.5	A	5.7
	Southbound - Add 2 nd through lane	B	14.7	C	20.9	B	11.5

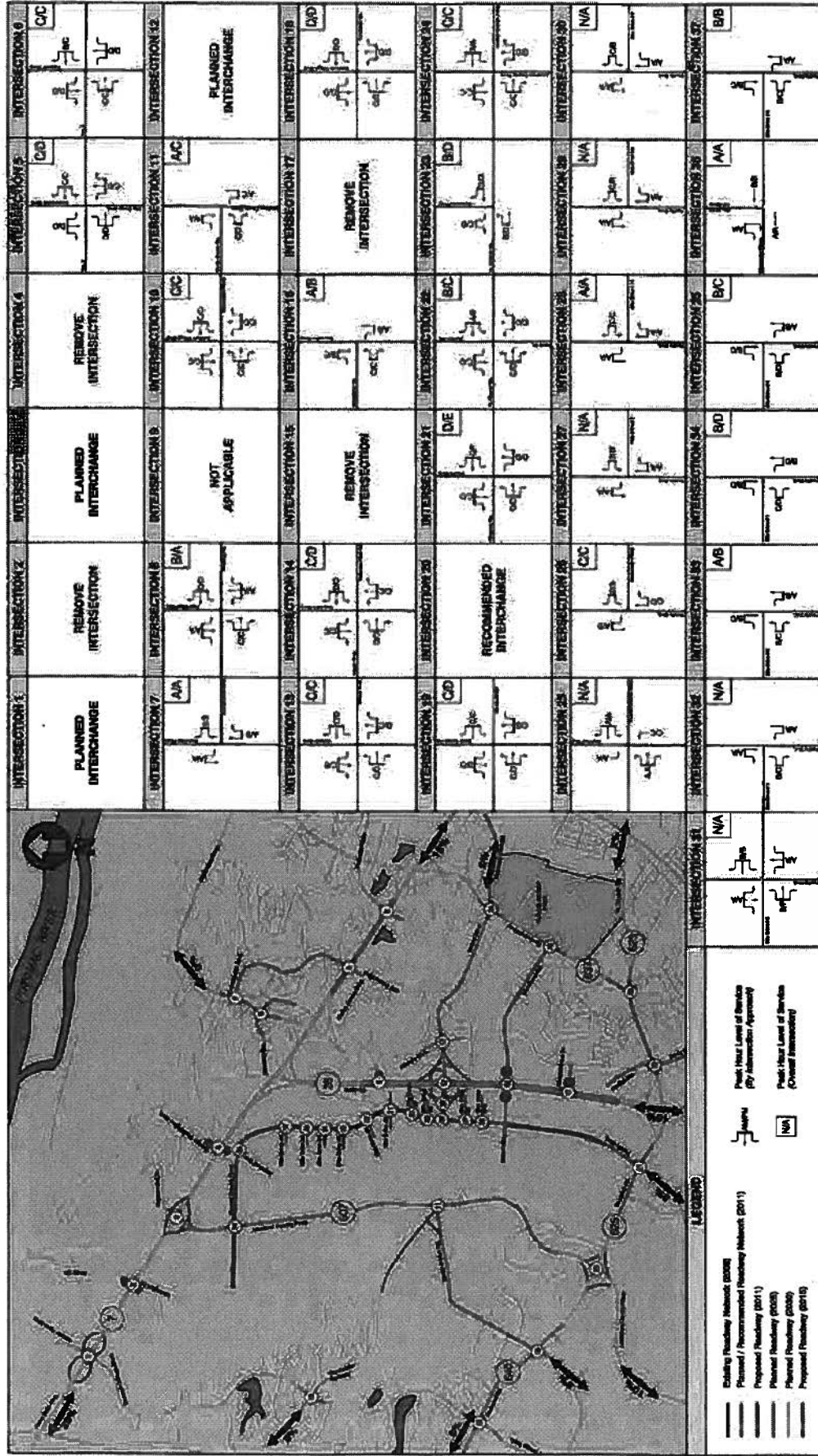
Note: N/A means not applicable.

As mentioned before, it is desirable to achieve an overall and per approach LOS D or better at each intersection. Assuming that the mitigation measures recommended in the total future 2011 conditions) and future background 2015 conditions were in place, the results presented in Table 9 show that some of the study intersections would operate at unacceptable levels of service under the full build-out year (2015) conditions with the proposed Kincora development. The following improvements would be required to meet the desired LOS criteria set forth by Loudoun County under this scenario:

- Intersection of Farmwell Road with Ashburn Village Boulevard:
 - Adjust signal timing and cycle length.
- Intersection of Waxpool Road with Pacific Boulevard:

- Add third eastbound left turn lane
- Convert eastbound right turn lane to free flow right
- Adjust signal timing and cycle length.
- *Intersection of Chruch Road wth Davis Drive and Ruritan Circle:*
 - Remove split phasing on northbound and southbound phases.
 - Adjust AM and PM signal timings and cycle lengths.
- *Intersection of Loudoun County Parkway with Russell Branch Parkway:*
 - Adjust AM and PM signal timings and cycle lengths.
- *Intersection of Gloucester Parkway with Pacific Boulevard:*
 - Add second northbound through lane
 - Add northbound right turn lane
 - Add second southbound through lane
- *Intersection of Pacific Boulevard with Site Drive #10;*
 - Install traffic signal
 - Add second northbound through lane
 - Add second southbound through lane.
- *Intersection of Pacific Boulevard with Site Drive #1; Intersection of Pacific Boulevard with Site Drive #4; Intersection of Pacific Boulevard with Site Drive #3;*
 - Install traffic signal
 - Add northbound left turn lane
 - Add second northbound through lane
 - Add second southbound through lane.
- *Intersection of Pacific Boulevard with Site Drive #9; Intersection of Pacific Boulevard with Site Drive #8; Intersection of Pacific Boulevard with Site Drive #7; Intersection of Pacific Boulevard with Site Drive #5; Intersection of Pacific Boulevard with Site Drive #6; Intersection of Pacific Boulevard with Site Drive #2;*
 - Add second northbound through lane
 - Add second southbound through lane.

As mentioned earlier in the report, no analyses were performed at the recommended interchanges. Figures 24A and B illustrate graphically the intersection capacity analysis results. Figure 25 shows the recommended improvements under the full build-out year conditions with the proposed Kincora development.



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Table 14: Total Future (2025) Intersection Capacity Analysis

Int. No.	Intersection (Approach/Movement)	Future Conditions (2025) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
1	Route 7 and Ashburn Village Blvd./Janella Farm Blvd.						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
2	Route 7 and Lexington Drive/Smith Circle						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
3	Route 7 and Loudoun County Parkway/Presidential Dr.						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
4	Route 7 and Richfield Way/George Washington Blvd.						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
5	Route 7 and City Center Blvd./Countryside Blvd.						
	Overall (Signalized)	D	36.4	E	69.7	--	--
	Eastbound	D	37.4	F	96.5	--	--
	Westbound	C	32.9	D	50.8	--	--
	Northbound	C	31.1	D	47.0	--	--
	Southbound	D	48.5	D	48.4	--	--
	Overall Mitigation - Change PM signal timing and cycle length	D	36.4	D	38.7	--	--
	Eastbound	D	37.4	D	40.6	--	--
	Westbound	C	32.9	C	34.6	--	--
	Northbound	C	31.1	D	47.7	--	--
	Southbound	D	48.5	D	53.6	--	--
6	Route 7 and Loudoun Tech Drive/Palisade Parkway						
	Overall (Signalized)	C	21.7	D	35.4	--	--
	Eastbound	C	20.4	D	35.7	--	--
	Westbound	B	18.6	C	30.5	--	--
	Northbound	D	48.4	D	45.1	--	--
	Southbound	D	44.7	D	50.6	--	--
7	Algonkian Parkway and Countryside Boulevard						
	Overall (Signalized)	A	6.3	A	9.0	--	--
	Westbound	B	13.1	B	13.4	--	--
	Northbound	A	9.2	B	12.5	--	--
	Southbound	A	2.6	A	3.6	--	--
8	Algonkian Parkway and Winding Road/Sutherland Lane						
	Overall (Signalized)	B	12.1	A	7.3	--	--
	Eastbound	C	34.4	C	33.8	--	--
	Westbound	D	35.6	D	37.4	--	--
	Northbound	A	4.7	A	4.3	--	--
	Southbound	A	6.8	A	5.0	--	--
9	Route 28 and Dulles Center Boulevard						
	Overall (All Free-Flow Movements)	N/A	N/A	N/A	N/A	N/A	N/A
10	Ashburn Village Boulevard and Gloucester Parkway						
	Overall (Signalized)	C	33.3	D	41.6	--	--
	Eastbound	D	42.2	D	54.2	--	--
	Westbound	C	26.4	D	52.3	--	--
	Northbound	C	29.4	D	36.8	--	--
	Southbound	C	31.1	C	30.7	--	--



Int. No.	Intersection (Approach/Movement)	Future Conditions (2025) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
	Overall Mitigation - Change AM signal timing	C	32.3	D	38.8	--	--
	Eastbound	C	34.2	D	44.8	--	--
	Westbound	C	29.0	D	42.8	--	--
	Northbound	C	31.4	D	40.0	--	--
	Southbound	C	33.5	C	31.5	--	--
11	Loudoun County Parkway and Smith Switch Road						
	Overall (Signalized)	F	208.7	F	770.0	F	83.9
	Eastbound	F	82.8	F	122.5	E	60.2
	Westbound	F	576.4	D	52.6	F	133.6
	Northbound	B	13.3	B	17.3	B	11.2
	Southbound	F	151.8	F	1553.5	F	110.5
	Overall Mitigation - Change signal timing and cycle length	D	35.9	D	48.2	C	30.0
	Eastbound - Add 2nd left turn lane and right turn bay	D	50.9	D	54.5	C	34.5
	Westbound - Add 2 left turn lanes, 2 through lanes and right turn bay	D	47.2	D	50.7	D	52.2
	Northbound - Add 3rd through lane and right turn bay	D	41.6	D	52.6	B	11.1
	Southbound - Add 2 left turn lanes, 3rd through lane and right turn bay	B	18.4	D	42.5	C	26.0
12	Route 28 and Nokes Boulevard						
	Overall (All Free-Flow Movements)	N/A	N/A	N/A	N/A	N/A	N/A
13	Nokes Boulevard and Atlantic Boulevard						
	Overall (Signalized)	C	34.3	C	32.9	--	--
	Eastbound	C	29.0	D	39.3	--	--
	Northbound	D	51.9	C	27.8	--	--
	Southbound	C	33.4	B	14.4	--	--
14	Nokes Boulevard and Cascade Pkwy./Potomac View Rd.						
	Overall (Signalized)	C	30.2	D	44.4	--	--
	Eastbound	D	39.9	D	48.4	--	--
	Westbound	D	40.3	D	49.8	--	--
	Northbound	C	23.0	D	43.3	--	--
	Southbound	C	27.0	D	40.0	--	--
15	Route 28 and Severn Way						
	Overall (Intersection Removed)	N/A	N/A	N/A	N/A	N/A	N/A
16	Potomac View Road and Woodland Road						
	Overall (Signalized)	A	7.4	B	16.4	--	--
	Eastbound	C	23.4	C	32.3	--	--
	Northbound	A	3.8	B	10.2	--	--
	Southbound	A	9.7	C	20.6	--	--
17	Route 28 and Steeplechase Drive						
	Overall (Intersection Removed)	N/A	N/A	N/A	N/A	N/A	N/A
18	Farmwell Road and Ashburn Village Boulevard						
	Overall (Signalized)	C	33.6	E	77.5	--	--
	Eastbound	C	34.7	D	40.0	--	--
	Westbound	B	19.3	F	110.0	--	--
	Northbound	D	50.2	D	53.4	--	--
	Southbound	D	37.2	D	39.3	--	--

Int. No.	Intersection (Approach/Movement)	Future Conditions (2025) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
	Overall Mitigation - Change PM signal timing and cycle length	C	33.6	D	43.8	--	--
	Eastbound	C	34.7	B	35.4	--	--
	Westbound	B	19.3	D	46.0	--	--
	Northbound	D	50.2	B	53.7	--	--
	Southbound	D	37.2	D	41.4	--	--
19	Farmwell Road and Waxpool Road/Smith Switch Road						
	Overall (Signalized)	B	20.0	D	41.7	--	--
	Eastbound	B	18.9	C	22.5	--	--
	Westbound	B	19.5	D	52.5	--	--
	Northbound	C	20.1	C	29.8	--	--
	Southbound	D	47.5	D	46.2	--	--
20	Waxpool Road and Loudoun County Parkway						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
21	Waxpool Road and Pacific Boulevard						
	Overall (Signalized)	F	206.3	F	88.7	D	35.9
	Eastbound	F	330.5	D	48.3	C	31.4
	Westbound	D	44.7	F	99.8	C	28.0
	Northbound	F	252.3	E	76.5	E	55.8
	Southbound	C	29.9	F	132.2	D	46.9
	Overall Mitigation - Change signal timing and cycle length	D	50.4	F	84.4	D	37.8
	Eastbound	D	46.4	D	49.0	C	31.5
	Westbound	D	54.3	F	100.0	D	28.1
	Northbound	F	252.3	D	54.4	D	54.5
	Southbound	D	52.6	F	132.2	D	53.8
22	Church Road and Davis Drive/Ruritan Circle						
	Overall (Signalized)	B	18.9	C	31.4	--	--
	Eastbound	C	27.4	D	42.8	--	--
	Westbound	A	8.0	B	11.1	--	--
	Northbound	C	31.7	D	39.0	--	--
	Southbound	C	34.6	C	34.4	--	--
23	Church Road and Cascades Parkway						
	Overall (Signalized)	C	20.6	D	49.3	--	--
	Eastbound	B	17.7	D	52.9	--	--
	Westbound	B	19.4	D	49.2	--	--
	Southbound	C	25.8	D	44.8	--	--
24	Loudoun County Parkway and Russell Branch Parkway						
	Overall (Signalized)	E	68.5	E	75.8	--	--
	Eastbound	C	20.4	B	17.0	--	--
	Westbound	A	6.3	F	139.7	--	--
	Northbound	D	42.8	E	60.2	--	--
	Southbound	F	103.4	E	62.1	--	--
	Overall Mitigation - Change signal timing and cycle length	D	46.7	D	35.3	--	--
	Eastbound	C	30.6	B	19.9	--	--
	Westbound	A	6.6	A	9.0	--	--
	Northbound	D	52.5	D	53.6	--	--
	Southbound	D	50.1	D	48.7	--	--

Int. No.	Intersection (Approach/Movement)	Future Conditions (2025) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
25	Russel Branch Parkway/Pacific Boulevard and Richfield Way/George Washington Boulevard						
	Overall (Signalized)	A	0.0	A	0.0	--	--
	Eastbound	A	0.0	A	0.0	--	--
	Westbound	A	0.0	A	0.0	--	--
	Northbound	A	0.0	D	29.3	--	--
	Southbound	A	0.0	A	0.0	--	--
26	Gloucester Parkway and Pacific Boulevard						
	Overall (Signalized)	F	290.6	F	473.6	F	189.2
	Eastbound	F	143.8	F	95.0	F	312.5
	Westbound	F	385.0	E	67.1	E	73.0
	Northbound	F	277.2	D	52.0	F	87.6
	Southbound	F	166.1	F	901.8	F	256.0
	Overall Mitigation - Change signal timing and cycle length	D	42.9	D	53.3	G	30.0
	Eastbound - Add 2 left turn lanes, 3 through lanes and a right turn lane	D	49.1	D	53.6	D	45.5
	Westbound - Allow free flow right turn lane	D	40.2	D	48.0	B	14.7
	Northbound - Add left turn bay	D	44.3	D	64.7	C	32.1
	Southbound - Add 2 nd left turn lane and right turn bay	D	42.6	D	54.8	G	29.1
27	Site Driveway #9 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	C	17.0	D	28.8	B	13.1
28	Site Driveway #10 and Pacific Boulevard						
	Overall (Signalized)	A	4.9	B	10.3	A	6.4
	Westbound	D	37.4	C	32.8	B	16.5
	Northbound	A	4.5	A	4.0	A	5.2
	Southbound	A	2.6	B	11.0	A	5.4
29	Site Driveway #8 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	C	23.4	B	12.9	C	20.1
30	Site Driveway #7 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	C	21.5	B	13.1	C	21.7
31	Site Driveway #6 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Eastbound	C	16.1	F	**	C	20.5
	Westbound	C	21.3	B	12.9	C	20.8
32	Site Driveway #5 and Pacific Boulevard						
	Overall (Unsignalized) (Add southbound right turn bay)	N/A	N/A	N/A	N/A	N/A	N/A
	Eastbound	B	11.0	F	**	B	13.7
33	Site Driveway #2 and Pacific Boulevard						
	Overall (Signalized)	D	50.6	F	88.4	B	10.7
	Eastbound	C	22.5	F	84.7	B	18.3
	Northbound	E	68.7	C	22.7	A	6.1
	Southbound	B	17.5	F	136.9	B	16.0
	Overall Mitigation - Change signal timing and cycle length	G	30.5	C	34.0	B	11.9
	Eastbound - Add right turn lane	B	18.2	D	44.5	B	12.2

Int. No.	Intersection (Approach/Movement)	Future Conditions (2025) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
	Northbound - Add left turn lane	D	35.1	C	22.5	A	8.8
	Southbound - Add 3 rd through lane	C	22.8	D	37.9	B	16.7
34	Site Driveway #1 and Pacific Boulevard						
	Overall (Signalized)	F	99.3	F	162.4	D	54.7
	Eastbound	C	28.0	F	238.5	D	53.3
	Northbound	F	152.8	E	78.7	E	74.3
	Southbound	B	18.7	F	195.7	C	26.3
	Overall Mitigation - Change signal timing and cycle length	D	38.3	C	28.9	D	40.2
	Eastbound - Add free flow right turn lane	A	9.0	C	24.4	D	40.6
	Northbound	D	50.0	C	22.6	D	52.5
	Southbound - Add right turn lane	C	23.5	D	37.5	C	21.9
35	Site Driveway #4 and Pacific Boulevard						
	Overall (Signalized)	F	88.8	F	131.0	B	18.5
	Eastbound	C	25.3	F	411.2	C	24.4
	Northbound	F	145.4	C	28.4	B	14.6
	Southbound	B	19.3	C	26.5	C	20.8
	Overall Mitigation - Change signal timing and cycle length	E	26.2	C	21.8	B	11.2
	Eastbound - Add right turn lane	D	20.2	D	27.6	B	14.0
	Northbound - Add left turn lane	C	21.3	B	17.3	A	6.2
	Southbound	C	34.6	D	22.9	B	16.0
36	Gloucester Parkway and Route 28 SB Off-Ramp						
	Overall (Signalized)	C	27.0	A	6.5	A	5.2
	Eastbound	A	0.0	A	1.9	A	0.0
	Westbound	B	13.3	A	6.6	B	11.5
	Southbound	F	86.2	C	26.3	A	8.9
	Overall Mitigation - Change AM signal timing	C	21.0	A	6.5	A	5.2
	Eastbound	A	0.0	A	1.9	A	0.0
	Westbound	C	20.7	A	6.6	B	11.5
	Southbound	D	44.8	C	26.3	A	8.9
37	Site Driveway #3 and Pacific Boulevard						
	Overall (Unsignalized)	F	118.1	F	96.1	B	13.3
	Eastbound	C	26.2	F	261.8	C	20.0
	Northbound	F	256.4	B	10.8	A	6.4
	Southbound	B	18.4	C	20.8	B	17.2
	Overall Mitigation - Install signal	D	35.9	B	10.8	A	8.5
	Eastbound - Add right turn lane	C	20.2	B	11.8	B	11.7
	Northbound - Add left turn lane	C	33.4	A	7.7	A	3.2
	Southbound	D	41.8	B	17.3	B	12.4

Note: N/A means not applicable.

- Intersection of Route 7 with City Center Boulevard and Countryside Boulevard:
 - Adjust PM signal timings and cycle lengths.
- Intersection of Ashburn Village Boulevard with Gloucester Parkway:
 - Adjust AM and PM signal timings.

- *Intersection of Loudoun County Parkway with Smith Switch Road:*
 - Add second eastbound left turn bay
 - Add eastbound right turn bay
 - Add 2 westbound left turn lanes, 2 through lanes and a right turn lane
 - Add third northbound through lane
 - Add northbound right turn lane
 - Add third southbound through lane
 - Add southbound right turn lane
 - Add 2 southbound left turn lanes
 - Adjust AM and PM signal timings and cycle lengths.
- *Intersection of Farmwell Road with Ashburn Village Boulevard:*
 - Adjust PM signal timings and cycle lengths.
- *Intersection of Waxpool Road with Pacific Boulevard:*
 - Adjust AM and PM signal timings and cycle lengths.
- *Intersection of Loudoun County Parkway with Russell Branch Parkway:*
 - Adjust AM and PM signal timings and cycle lengths.
- *Intersection of Pacific Boulevard with Gloucester Parkway:*
 - Adjust AM and PM signal timings and cycle lengths
 - Add 2 eastbound left turn lanes, 3 through lanes and a right turn lane
 - Convert westbound right turn lane to a free flow right
 - Add northbound left turn lane
 - Add second southbound left turn lane and a right turn bay.
- *Intersection of Route 28 Westbound Off-Ramp with Gloucester Parkway:*
 - Adjust AM signal timings.
- *Intersection of Pacific Boulevard with Site Driveway #5:*
 - Add southbound right turn lane
- *Intersection of Pacific Boulevard with Site Driveway #2:*
 - Add third southbound through lane.
 - Adjust AM and PM signal timings and cycle lengths.

- *Intersection of Pacific Boulevard with Site Driveway #1:*
 - Add eastbound free flow right turn lane
 - Add southbound right turn lane
 - Adjust AM and PM signal timings and cycle lengths.
- *Intersection of Pacific Boulevard with Site Driveway #4:*
 - Add eastbound right turn lane
 - Adjust AM and PM signal timings and cycle lengths.
- *Intersection of Pacific Boulevard with Site Driveway #3:*
 - Add eastbound right turn lane

As mentioned earlier in the report, no analyses were performed at the recommended interchanges. No improvements were recommended at the intersection of Russell Branch Parkway with Richfield Way since adequate gaps would be created by adjacent signalized intersection to allow acceptable traffic operations at the conflicting movements of the unsignalized intersection. **Figures 38A and B** illustrate graphically the intersection capacity analysis results. **Figure 39** shows the recommended improvements under the full build-out year conditions with the proposed Kincora development.

POTOMAC RIVER

INTERSECTION 1	INTERSECTION 2	INTERSECTION 3	INTERSECTION 4	INTERSECTION 5	INTERSECTION 6	INTERSECTION 7	INTERSECTION 8	INTERSECTION 9	INTERSECTION 10	INTERSECTION 11	INTERSECTION 12
PLANNED INTERCHANGE	REMOVE INTERSECTION	PLANNED INTERCHANGE	REMOVE INTERSECTION	CD	DD	AA	BA	NOT APPLICABLE	CD	DD	PLANNED INTERCHANGE
INTERSECTION 13	INTERSECTION 14	INTERSECTION 15	INTERSECTION 16	INTERSECTION 17	INTERSECTION 18	INTERSECTION 19	INTERSECTION 20	INTERSECTION 21	INTERSECTION 22	INTERSECTION 23	INTERSECTION 24
CD	CD	AB	BC	DF	DD	B2D	RECOMMENDED INTERCHANGE	N/A	DD	NA	NA
INTERSECTION 25	INTERSECTION 26	INTERSECTION 27	INTERSECTION 28	INTERSECTION 29	INTERSECTION 30	INTERSECTION 31	INTERSECTION 32	INTERSECTION 33	INTERSECTION 34	INTERSECTION 35	INTERSECTION 36
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
INTERSECTION 37	INTERSECTION 38	INTERSECTION 39	INTERSECTION 40	INTERSECTION 41	INTERSECTION 42	INTERSECTION 43	INTERSECTION 44	INTERSECTION 45	INTERSECTION 46	INTERSECTION 47	INTERSECTION 48
DB	CA	CC	DC	CC	CC	NA	NA	NA	NA	NA	NA

LEGEND

- Existing Roadway Network (2002)
- Planned / Recommended Roadway Network (2011)
- Proposed Roadway (2011)
- Planned Roadway (2002)
- Planned Roadway (2006)
- Proposed Roadway (2011)
- Proposed Roadway (2002)

Peak Hour Level of Service (By Intersection Approach)

Peak Hour Level of Service (Overall Intersection)

April 27, 2009

Table 15: Total Future (2030) Intersection Capacity Analysis

Int. No.	Intersection (Approach/Movement)	Future Conditions (2030) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
1	Route 7 and Ashburn Village Blvd./Janelia Farm Blvd.						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
2	Route 7 and Lexington Drive/Smith Circle						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
3	Route 7 and Loudoun County Parkway/Presidential Dr.						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
4	Route 7 and Richfield Way/George Washington Blvd.						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
5	Route 7 and City Center Blvd./Countryside Blvd.						
	Overall (Signalized)	D	36.4	D	39.7	--	--
	Eastbound	D	37.4	D	40.5	--	--
	Westbound	C	32.9	C	34.6	--	--
	Northbound	C	31.1	D	47.7	--	--
	Southbound	D	48.5	D	53.6	--	--
6	Route 7 and Loudoun Tech Drive/Palisade Parkway						
	Overall (Signalized)	C	21.7	D	35.4	--	--
	Eastbound	C	20.4	D	35.7	--	--
	Westbound	B	18.6	C	30.5	--	--
	Northbound	D	48.4	D	45.1	--	--
	Southbound	D	44.7	D	50.6	--	--
7	Algonkian Parkway and Countryside Boulevard						
	Overall (Signalized)	A	6.3	A	9.0	--	--
	Westbound	B	13.1	B	13.4	--	--
	Northbound	A	9.2	B	12.5	--	--
	Southbound	A	2.6	A	3.6	--	--
8	Algonkian Parkway and Winding Road/Sutherland Lane						
	Overall (Signalized)	B	12.1	A	7.3	--	--
	Eastbound	C	34.4	C	33.8	--	--
	Westbound	D	35.6	D	37.4	--	--
	Northbound	A	4.7	A	4.3	--	--
	Southbound	A	6.8	A	5.0	--	--
9	Route 28 and Dulles Center Boulevard						
	Overall (All Free-Flow Movements)	N/A	N/A	N/A	N/A	N/A	N/A
10	Ashburn Village Boulevard and Gloucester Parkway						
	Overall (Signalized)	C	32.3	D	38.8	--	--
	Eastbound	C	34.2	D	44.8	--	--
	Westbound	C	29.0	D	42.8	--	--
	Northbound	C	31.4	D	40.0	--	--
	Southbound	C	33.5	C	31.5	--	--
11	Loudoun County Parkway and Smith Switch Road						
	Overall (Signalized)	D	36.9	D	48.2	C	30.0
	Eastbound	D	50.9	D	54.4	C	34.5
	Westbound	D	47.2	D	50.7	D	52.2
	Northbound	D	41.6	D	52.6	B	11.1
	Southbound	B	18.4	D	42.5	C	26.0
12	Route 28 and Nokes Boulevard						
	Overall (All Free-Flow Movements)	N/A	N/A	N/A	N/A	N/A	N/A

Int. No.	Intersection (Approach/Movement)	Future Conditions (2030) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
13	Nokes Boulevard and Atlantic Boulevard						
	Overall (Signalized)	C	34.3	C	32.3	--	--
	Eastbound	C	29.0	D	41.6	--	--
	Westbound	C	30.9	D	44.7	--	--
	Northbound	D	51.9	C	26.4	--	--
	Southbound	C	33.4	B	14.1	--	--
14	Nokes Boulevard and Cascade Pkwy./Potomac View Rd.						
	Overall (Signalized)	C	30.5	D	46.7	--	--
	Eastbound	D	40.3	D	49.0	--	--
	Westbound	D	40.8	D	50.3	--	--
	Northbound	C	23.1	D	47.8	--	--
	Southbound	C	27.4	D	41.5	--	--
15	Route 28 and Severn Way						
	Overall (Intersection Removed)	N/A	N/A	N/A	N/A	N/A	N/A
16	Potomac View Road and Woodland Road						
	Overall (Signalized)	A	8.0	B	17.1	--	--
	Eastbound	C	23.2	C	34.7	--	--
	Northbound	A	3.9	B	10.8	--	--
	Southbound	B	11.0	C	21.2	--	--
17	Route 28 and Steeplechase Drive						
	Overall (Intersection Removed)	N/A	N/A	N/A	N/A	N/A	N/A
18	Farmwell Road and Ashburn Village Boulevard						
	Overall (Signalized)	C	34.0	D	48.8	--	--
	Eastbound	D	35.6	D	35.5	--	--
	Westbound	B	19.5	E	55.3	--	--
	Northbound	D	50.2	D	53.7	--	--
	Southbound	D	37.2	D	41.4	--	--
19	Farmwell Road and Waxpool Road/Smith Switch Road						
	Overall (Signalized)	B	19.1	D	40.7	--	--
	Eastbound	B	17.6	B	18.4	--	--
	Westbound	B	18.8	D	52.0	--	--
	Northbound	C	20.3	C	30.3	--	--
	Southbound	D	48.9	D	46.2	--	--
20	Waxpool Road and Loudoun County Parkway						
	Intersection converted into a grade-separated interchange in the Future Background (2011) Conditions						
21	Waxpool Road and Pacific Boulevard						
	Overall (Signalized)	E	58.7	F	103.4	D	27.9
	Eastbound	E	55.7	D	48.2	C	31.4
	Westbound	E	64.0	F	122.7	C	29.2
	Northbound	E	61.4	D	54.4	D	54.5
	Southbound	D	52.6	F	161.5	D	53.8
22	Church Road and Davis Drive/Ruritan Circle						
	Overall (Signalized)	C	21.8	D	46.3	--	--
	Eastbound	C	33.4	E	66.9	--	--
	Westbound	A	8.1	B	12.9	--	--
	Northbound	C	31.7	D	44.2	--	--
	Southbound	C	34.6	D	36.8	--	--

Int. No.	Intersection (Approach/Movement)	Future Conditions (2030) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
23	Church Road and Potomac View Road						
	Overall (Signalized)	C	21.8	E	58.5	--	--
	Eastbound	B	18.7	E	70.2	--	--
	Westbound	C	20.8	D	54.4	--	--
	Southbound	C	27.2	D	47.3	--	--
24	Loudoun County Parkway and Russell Branch Parkway						
	Overall (Signalized)	D	48.6	D	35.3	--	--
	Eastbound	C	30.6	B	19.9	--	--
	Westbound	A	6.6	A	9.9	--	--
	Northbound	D	53.8	D	53.6	--	--
	Southbound	D	52.5	D	48.7	--	--
25	Russel Branch Parkway/Pacific Boulevard and Richfield Way/George Washington Boulevard						
	Overall (Signalized)	A	0.0	A	0.0	--	--
	Eastbound	A	0.0	A	0.0	--	--
	Westbound	A	0.0	A	0.0	--	--
	Northbound	A	0.0	D	34.1	--	--
	Southbound	A	0.0	A	0.0	--	--
26	Gloucester Parkway and Pacific Boulevard						
	Overall (Signalized)	D	42.9	D	53.3	C	30.0
	Eastbound	D	49.1	D	53.6	D	45.5
	Westbound	D	40.2	D	48.0	B	14.7
	Northbound	D	44.9	D	54.7	C	32.1
	Southbound	D	42.6	D	54.8	C	29.1
27	Site Driveway #9 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	C	17.0	D	31.1	B	13.1
28	Site Driveway #10 and Pacific Boulevard						
	Overall (Signalized)	A	4.9	A	9.7	A	6.4
	Westbound	D	37.4	C	31.0	B	16.5
	Northbound	A	4.5	A	4.0	A	5.2
	Southbound	A	2.6	B	10.2	A	5.4
29	Site Driveway #8 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	C	24.4	B	12.9	C	20.1
30	Site Driveway #7 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Westbound	C	21.5	B	13.1	C	21.7
31	Site Driveway #6 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Eastbound	C	16.1	F	**	C	20.5
	Westbound	C	21.3	B	12.9	C	20.8
32	Site Driveway #5 and Pacific Boulevard						
	Overall (Unsignalized)	N/A	N/A	N/A	N/A	N/A	N/A
	Eastbound	B	12.7	F	**	B	13.1
33	Site Driveway #2 and Pacific Boulevard						
	Overall (Signalized)	C	30.5	C	34.0	B	11.9
	Eastbound	B	18.2	D	44.5	B	12.2
	Northbound	D	35.1	C	22.5	A	8.8
	Southbound	C	32.8	D	37.9	B	16.7

Int. No.	Intersection (Approach/Movement)	Future Conditions (2030) with Development					
		AM Peak Hour		PM Peak Hour		Saturday Peak Hour	
		LOS	Delay	LOS	Delay	LOS	Delay
34	Site Driveway #1 and Pacific Boulevard						
	Overall (Signalized)	D	38.3	C	28.9	D	40.2
	Eastbound	A	9.0	C	24.4	D	40.6
	Northbound	D	50.0	C	22.6	D	52.5
	Southbound	C	23.5	D	37.5	C	21.9
35	Site Driveway #4 and Pacific Boulevard						
	Overall (Signalized)	C	26.2	C	21.8	B	11.2
	Eastbound	C	20.2	C	27.6	B	14.0
	Northbound	C	21.5	B	17.3	A	6.2
	Southbound	C	34.6	C	22.9	B	16.0
36	Gloucester Parkway and Route 28 SB Off-Ramp						
	Overall (Unsignalized)	C	21.0	A	6.9	A	5.2
	Eastbound	A	0.0	A	3.2	A	0.0
	Westbound	C	20.7	A	6.4	B	11.5
	Southbound	D	44.8	C	30.8	A	8.9
37	Site Driveway #3 and Pacific Boulevard						
	Overall (Unsignalized)	D	35.9	B	10.8	A	8.5
	Eastbound	C	20.2	B	11.8	B	11.7
	Northbound	C	33.4	A	7.7	A	3.2
	Southbound	D	41.8	B	17.3	B	12.4

Note: N/A means not applicable.

As mentioned in previous sections of this report, it is desirable to achieve an overall and per approach LOS D or better at each intersection. Assuming that the mitigation measures recommended in the total future 2025 conditions were in place, the results presented in Table 15 show that most of the study intersections would operate at acceptable levels of service under the total future 2030 conditions.

Figures 41A and B illustrate graphically the intersection capacity analysis results.

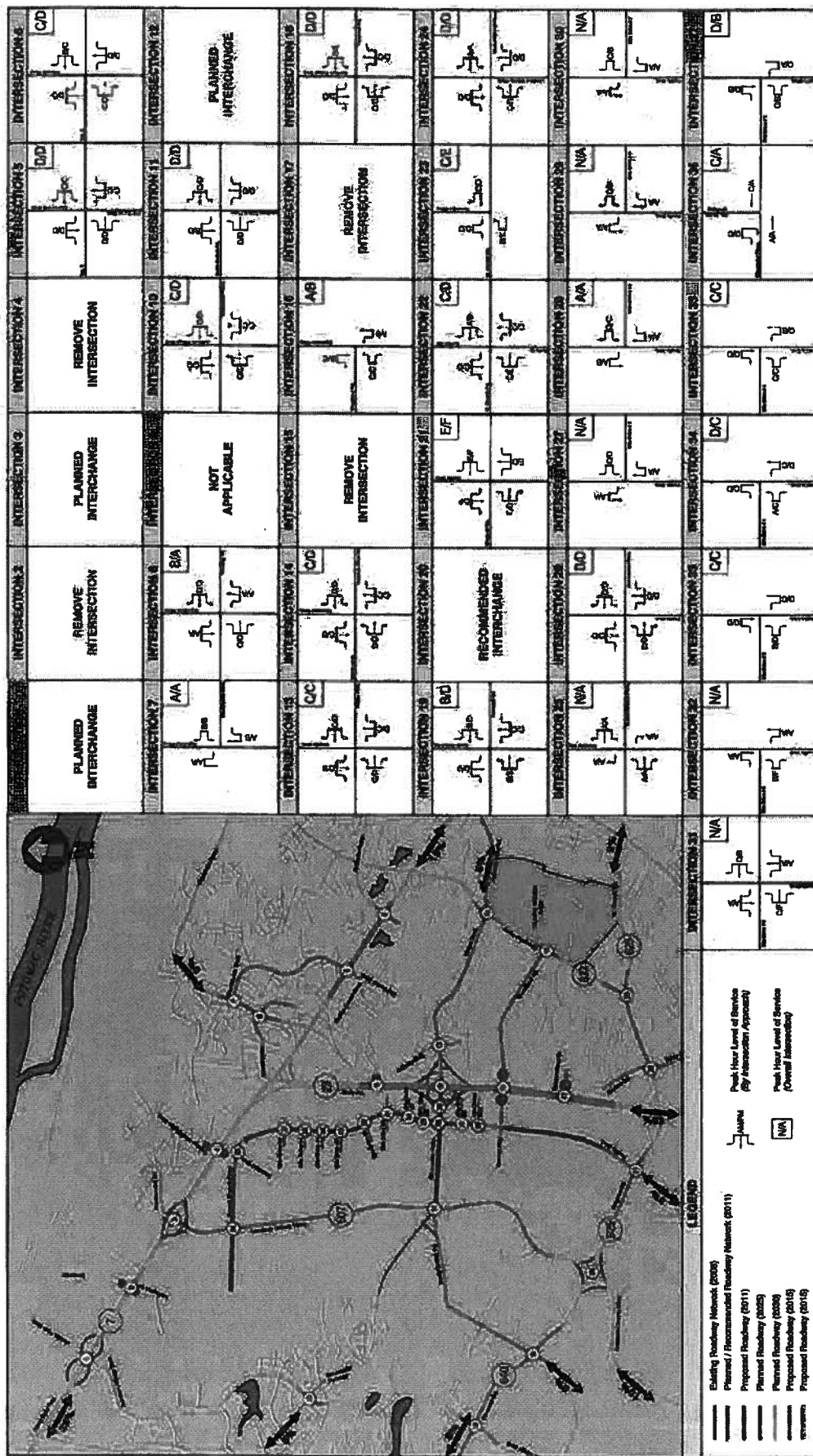


Figure 41A
Future Conditions with Development (2030) Peak Hour Levels of Service - Weekday

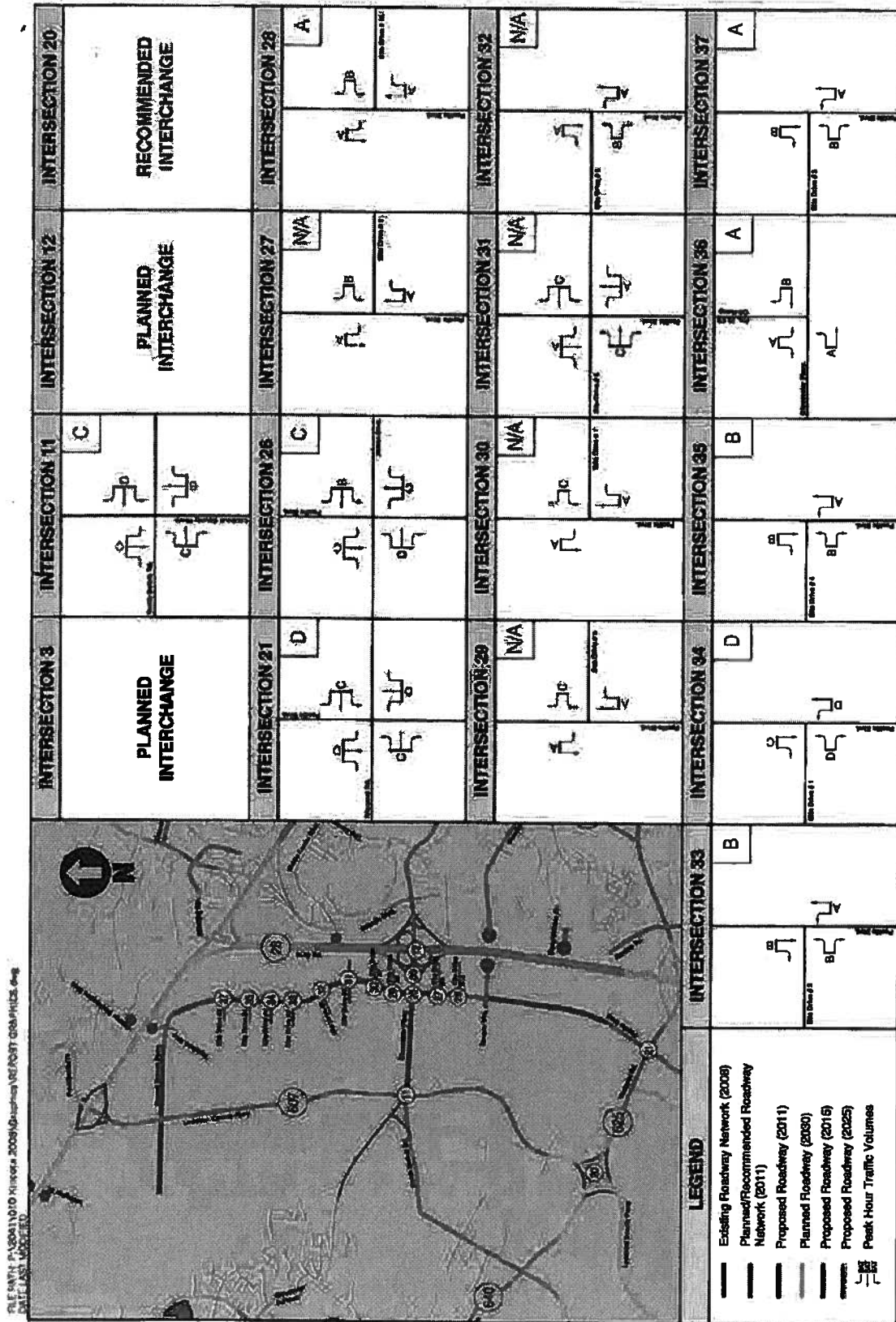


Figure 41B
Future Conditions with Development (2030) Peak Hour Levels of Service - Saturday

CONCLUSIONS

Site Location and Study Area

The site is located north of Route 847 (Severn Way), south of Route 7 (Harry Byrd Highway), east of Route 607 (Loudoun County Parkway), and west of Route 28 (Sully Road). The study area for the traffic study supporting the rezoning encompasses a number of intersections throughout the eastern portions of Loudoun County.

Description of Proposed Development

The proposed development is uniquely located in the epicenter of educational institutions and commercial developments in Loudoun County. The unique location coupled with the vibrant mixed use concept has resulted in an overall development mix, which will include commercial office, retail uses, hotels, recreational facilities, residential units, structured garage, street and surface parking, a baseball stadium, along with pedestrian walkways, sidewalks and alleyways, incorporating streetscape enhancements, including bicycle amenities. By providing corresponding uses on the same site, the proposed development will encourage self-contained pedestrian trips. The project will be completed in three phases with phase I in 2011, phase II in 2015 and full build-out (Phase III) of the development expected in 2025.

The project site consists of approximately 9.1 million square feet of developable land designated as keynote employment under the Loudoun County's Revised General Plan and currently zoned for "flex" industrial use (PD-IP). Consistent with the Revised General Plan, the proposed development program calls for a rezoning of the property to PD-MUB (Planned Development- Mixed Use Business District) to allow for a maximum of approximately 7.4 million square feet of mixed-use development consisting of approximately 4.7 million square feet of office use, approximately 500,000 square feet of retail development, approximately 1.8 million square feet of residential use, and a baseball stadium (5,500 seating capacity).

Principal Findings, Conclusions and Recommendations

The proposed development plan for the proposed Kincora project calls for a Special Exception to allow for a baseball stadium, and office with some supporting auxiliary development on the site. A rezoning of the property is also proposed to PD-MUB to allow for the proposed mixed-use development with the baseball stadium. *Although, the proposed Rezoning application incorporates the Special Exception uses, in order to differentiate between the two applications, the conclusions and recommendations are listed separately:*

Stadium Special Exception

1. The proposed baseball stadium will be constructed in the initial phase of the proposed

- development. The construction of the proposed stadium is scheduled to be complete by 2011
2. The proposed facility will compliment the current community, commercial, corporate, and residential benefits available to residents of both the county and neighboring counties, and serve as a significant economic stimulus and destination to the overall Loudoun County economy.
 3. The proposed baseball stadium will have a seating capacity of approximately 5, 500 and is planned to host minor league baseball games.
 4. The traffic generated by the proposed stadium will be in the off peak hours and will not interfere with the peak commute time period. Majority of the games will be held over the weekend. Per VDOT and County staff's request, a Saturday scenario was analyzed for the traffic generated by the baseball stadium.
 5. A half-section of Pacific Boulevard (two-lane) from Gloucester Parkway to the stadium entrance will be constructed to serve the stadium patrons.
 6. Of note, the existing and regional traffic on the roadway network in the vicinity of the proposed development is lower during the weekends. In addition, the trips generated by the office, retail and residential components of the proposed mixed-use development on a typical weekday are higher than the trips generated by the mixed-use development and the baseball stadium over the weekend.
 7. Hence, the analysis reveals that the proposed roadway network combined with the roadway elements recommended by other private developers and public agencies will result in a roadway network that can accommodate the traffic generated by the special exception use (baseball stadium).

Rezoning Application

According to Loudoun County, it is desirable to achieve an overall and per approach level of service (LOS) D or better. Based on these guidelines, the analysis presented in this report supports the following major conclusions:

1. The Kincora site is planned as a mixed-use community with a live work environment that provides a full range of land uses including office, retail, and residential developments.
2. The site is uniquely located adjacent to two planned limited access highways (i.e. Route 7 and Route 28), and will be served by a future grade-separated interchange at the Route 28 and Nokes Boulevard intersection.
3. Full build-out site traffic can be accommodated by the existing, planned, and proposed roadway networks with local connections of Gloucester Parkway to Route 28, Pacific Boulevard to Russell Branch Parkway, and a grade-separated interchange at the existing Route 28 and Nokes Boulevard intersection.

4. The following is a summary of the roadway elements required to accommodate existing and future regional, local, and site traffic:

- a. The Route 7 and Route 28 corridors will be required to be widened to eight lanes and have grade-separated interchanges within the vicinity of the proposed development in order to handle the commuting traffic traveling to and from eastern Loudoun County, points west, Fairfax County, and Washington, D.C.
- b. Regional roadways like Waxpool Road and Loudoun County Parkway will require major lane improvements to accommodate commuter and local traffic.
- c. Roadway and signal improvements will be required at major intersections to accommodate regional, local, and site traffic.
- d. The following mitigation measures will be required under the Phase I (2011) conditions with the proposed Kincora development considering the Route 28 and Nokes Boulevard Interchange:
 - *Roadway and Signal Improvements:*
 - Gloucester Parkway and Pacific Boulevard
 - Pacific Boulevard and Future Site Drive #2
- e. The following mitigation measures will be required under the Phase II (2015) conditions with the proposed Kincora development:
 - *Roadway and Signal Improvements:*
 - Farmwell Road and Ashburn Village Boulevard
 - Waxpool Road and Pacific Boulevard
 - Gloucester Parkway and Pacific Boulevard
 - Pacific Boulevard and all proposed site driveways
 - *Signal Improvements:*
 - Route 7 with Loudoun Tech Drive/Palisade Parkway
 - Loudoun County Parkway and Smith Switch Road
 - Nokes Boulevard with Cascade Parkway/Potomac View Road
 - Farmwell Road with Smith Switch Road
 - Chruch Road with Davis Drive and Ruritan Circle
 - Loudoun County Parkway with Russel Branch Parkway
- f. The following mitigation measures will be required under the full build out, Phase III (2025) conditions with the proposed Kincora development:

- *Roadway and Signal Improvements:*
 - Loudoun County Parkway and Smith Switch Road/Gloucester Parkway
 - Farmwell Road and Ashburn Village Boulevard
 - Waxpool Road and Pacific Boulevard
 - Farmwell Road and Smith Switch Road/Waxpool Road
 - Gloucester Parkway and Pacific Boulevard
 - Pacific Boulevard and all proposed site driveways
- *Signal Improvements:*
 - Route 7 with City Center Boulevard
 - Ashburn Village Boulevard with Gloucester Parkway
 - Waxpool Road with Pacific Boulevard

The results of the study have identified that the roadway network planned as part of this project combined with the roadway elements recommended by other private developers and public agencies will result in a roadway network that can accommodate the combination of both the proposed development and the anticipated traffic as part of future non-site related traffic.

County of Loudoun
Department of Planning
MEMORANDUM

DATE: December 14, 2009

TO: Judi Birkitt, Project Manager, Land Use Review

FROM: Heidi Siebenfitt, ~~Historic~~ Historic Preservation Planner, Community Information and Outreach, Marie Genovese, Planner, Community Planning, and Brian Fuller, Planner, Parks, Recreation and Community Services.

SUBJECT: ZMAP 2008-0021 Kincora Village Center - 3rd Referral

Please note that the following represents the second set of interdepartmental referral comments from the Department of Planning's, Community Planning and Community Information and Outreach Divisions, and the Department of Parks Recreation and Community Service (PRCS). Staff note that the above agencies and divisions concur with Office of Transportation Services (OTS) and Virginia Department of Transportation (VDOT) referral comments which recommend that the ultimate alignment of Pacific Boulevard avoid the Broad Run Toll House and Bridge property and allow the preservation of this resource in place.

Background

The applicant is requesting a Zoning Map Amendment (ZMAP) of an approximately 336.64 acre property located in the southwest quadrant of the Route 7 and Route 28 interchange (subject property). The subject property is located within the Route 28 Tax District and is currently zoned Planned Development-Industrial Park (PD-IP) under the 1972 Zoning Ordinance. The ZMAP application requests that the property be re-zoned to Planned Development- Mixed Use Business (PD-MUB).

The current memorandum represents the third set of referral comments related to the heritage resource issues associated with the subject application and the second referral authored jointly by staff from Community Planning, Community Information and Outreach and the Department of Parks Recreation and Community Services (PRCS). The previous referral, dated August 25, 2009, outlined several specific steps for the evaluation of the historic Broad Run Toll House and Bridge property and contained recommendations for the preservation

and adaptive re-use of these resources based on the policies of the County's Heritage Preservation Plan.

Analysis

Staff have reviewed the applicant's response to County agencies second round of referral comments. The applicant did not include any response to the Department of Planning and PRCS August 25, 2009 joint referral. One minor amendment has been made by the applicant to the October 5, 2009 draft Proffer Statement. Proffer "D" located on page 34 of the document has been amended to include the Loudoun County Historic District Review Committee (HDRC) as a consulting party to the applicant on the ultimate disposition of the Toll House structure. Since the Toll House and Bridge property is a County designated historic site district, per Section 6-300 of the Zoning Ordinance, the HDRC's approval of any proposed alterations to the building, including its relocation or demolition, is an Zoning Ordinance requirement that cannot be proffered to the County at the discretion of the applicant.

The Heritage Preservation Plan calls for the preservation of significant heritage resources in place (Heritage Preservation Plan, Chapter 9, Historic Standing Structures and their Settings, Policy 1). Staff continue to strongly advocate for avoidance of the Toll House and Bridge Ruins and consider this the only preservation outcome. As stated in the first and second referral comments, removal of the Toll House from its historic context severely undermines the historic (and likely structural) integrity of this important resource. The location of the Toll House and Bridge Ruins adjacent to the original right of way of the Leesburg Turnpike and the original bridge right of way spanning the Broad Run is integral to the historic significance of these resources and their interpretive value to the public.

Staff note that even if the approved road alignment for Pacific Boulevard avoids the Toll House, the new construction will further visually impact the historic landscape associated with the resource. However, staff recommend that this visual impact is preferable to the removal or "re-location" of the resource, since the Toll House and Bridge Ruins may still be interpreted in the context of the continued evolution of the County's transportation network. These resources can still be identified and interpreted as markers of the County's early 19th century road improvements associated with the changing economy, market centers and land uses of that century.

Staff stress that any proposed relocation of the Toll House structure is not considered "preservation" of the resource. There is little public benefit in reconstructing the Toll House apart from its original historic context. That being said, if the subject application is approved with a road alignment that requires the destruction of the Toll House, staff would encourage the salvage and recycling of all historic building materials for re-use in a project that would be of benefit to area residents, such as a park amenity associated with the Broad Run Trail.

As currently written, the draft proffer statement remains ambiguous and fails to accommodate or address the preservation of the Toll House and Bridge Ruins in place. Moreover, the draft proffer statement does not adequately address any of the recommendations in the August 25, 2009 referral including a historic and structural analysis of the Toll House, short term protection and maintenance, and adaptive re-use of both the Toll House and the Bridge Ruins. The draft proffer continues to state that the Toll house will be relocated "if feasible", but fails to specify how and when this would be accomplished and to what purpose. Further, because "feasibility" is not defined in the proffer, there is no standard for such a determination. Therefore, Proffer "D" as currently written is not enforceable and does not provide for the evaluation, protection, preservation or re-use of the Toll House and Bridge Ruins.

Recommendations

Specific staff recommendations that would achieve the preservation of this important resource are contained in the August 25, 2009 Joint Referral and staff continue to advocate for those recommendations which are generally summarized below:

1. Staff strongly recommend that the ultimate alignment of the extension of Pacific Boulevard allows for the preservation of the Toll House and Bridge Ruins in place even if such an alignment should further visually impact the historic landscape of these resources.
2. Staff recommend that the applicant include the Toll House and Bridge property in the application. Since it does not appear that the applicant is meeting the public and civic space component of the land use mix called for in the Revised General Plan (see Community Planning 3rd referral), the inclusion of the property in the application would provide a valuable civic space component to the application and allow for the preservation of the Toll House in place as an interpretable historic public resource with pedestrian access. This recommendation would also facilitate the possible re-use of the original Broad Run Bridge right of way for a pedestrian foot bridge across Broad Run. This is a necessary connection for the future Broad Run Trail and Potomac Heritage National Scenic Trail. Salvaged building stones from the bridge ruins could be re-used to construct such a crossing.
3. Staff continue to stress the need for an historic and structural evaluation of the Toll House in the form of a Historic Building Survey conducted by a qualified professional. The data contained in such a report should be the point of departure for future decisions about the preservation, interpretation or disassembly of the structure.

4. Staff again urges the applicant to coordinate with the Virginia Department of Historic Resources. The proposed development project will likely require Section 106 review under the National Historic Preservation Act of 1966. Although the Broad Run Toll House and Bridge Ruins are off-site, impacts to this nationally recognized historic property are of such magnitude that mitigation would be required of the applicant as part of this federal review process. To ensure that any proffers approved as part of this re-zoning application are consistent with future state and federal requirements, early coordination is imperative.

cc: Julie Pastor, AICP, Director, Department of Planning
Diane Ryburn, Director, PRCS
Michael "Miguel" Salinas, Program Manager, CIO
Cindy Keegan, Program Manager, Community Planning

County of Loudoun
Department of Planning
MEMORANDUM

DATE: August 25, 2009

TO: Judi Birkitt, Senior Planner, Land Use Review

FROM: Brian Fuller, Park Planner, Parks Recreation and Community Services,
Marie Genovese, Planner, Department of Planning (Community Planning
Division), Kate McConnell, Planner and Heidi Siebentritt, Historic
Preservation Planner, Department of Planning (Community Information
and Outreach Division)

SUBJECT: ZMAP 2008-0021 Kincora, Second Referral – Historic Resources

Please note that the following represents referral comments from the Department of Planning, Community Planning and Community Information and Outreach Divisions, and the Department of Parks Recreation and Community Services and are the result of several interdepartmental meetings specific to the issue of preserving and adaptively re-using the historically significant Broad Run Toll House and Bridge property as part of the subject development application.

Background

In reviewing the applicant's amended draft proffer statement, dated July 23, 2009, County staff note the addition of Proffer IV.D, Broad Run Toll House which states that if the extension of Pacific Boulevard across the Broad Run connecting with Russell Branch Parkway adversely affects the preservation of the Broad Run Toll House in its current location the applicant will, if feasible, relocate the Toll House from its current location to a suitable location on the subject property. Per previous conversations with the applicant, it is staff's understanding that the Toll House property, specifically identified as Parcel 040-39-8734, would be acquired by the applicant pursuant to the approval of SPEX 2008-0052. The Toll House property is integral to the site design proposed in the current application and will be impacted by the construction of the extension of Pacific Boulevard, although the effect on the Toll House will be dependent on the ultimate road alignment.

The Broad Run Toll House and Bridge Ruins are the only such combination existing in Virginia and as such this resource was one of the first Loudoun County properties to be listed in the National Register of Historic Places in 1970. The Toll House and Bridge

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were then designated by the County as a local Historic Site District in 1972. Please note that the effect of local designation is the required review and approval by the County's Historic District Review Committee (HDRC) of any proposed exterior alteration to the Toll House, including demolition or relocation. Therefore, the HDRC process will be integral to the ultimate treatment/disposition of this resource.

Though the stone, arched double spanned bridge has been lost to flooding, the original stone house appears to retain its historic and structural integrity and continues, after nearly 200 years, to mark the location of one of the first toll gates erected along the Leesburg Turnpike. **Because of the significance of this County historic resource, staff recommends that Parcel 040-39-8734 be included with the rezoning application and that specific actions be outlined in the applicant's proffer statement which will facilitate the preservation of the resource.**

Plan Compliance

The subject property is governed by the Revised General Plan and the Heritage Preservation Plan. Because the HDRC will be involved in the preservation of the resource, the County's Historic District Guidelines will also apply. Both Plans outline the County's commitment to protecting structures and other features of particular historical significance in the context of their natural and historic settings while working with landowners to convey the historic value of the resource to the community at large (Revised General Plan, Chapter 5, Historic and Archaeological Resources Policies, Policy 8).

Outstanding Issues

While County staff appreciates the Applicant's recognition of this valuable historic resource and their initial commitment to its preservation in Proffer IVD, the proffer currently proposes the relocation of the Toll House if the alignment of Pacific Boulevard would impact the structure. It is the County's first priority to preserve significant historic structures in place and in the context of their historic settings. While it may not always be feasible to promote the original use for which a historic structure was constructed, the County recognizes the value of the building itself as a historic resource and calls for preservation through adaptive re-use (Heritage Preservation Plan, Chapter 9, Historic Standing Structures and their Settings, Policy 1). Staff recommends the Applicant reference Chapter 10 of the Heritage Preservation Plan which provides "Guidelines for the Preservation of Historic Standing Structures" and outlines specific County policies regarding the preservation of historic structures. Additionally, the County's Historic District Guidelines, which are the standards used by HDRC in reviewing proposals in local districts, contain "Guidelines for Demolition and Moving." The Guidelines specifically state that moving historic structures from their original site should be avoided (Historic District Guidelines, Chapter 10).

The County recognizes the value of the Toll House as a historic resource. Staff recommend the applicant preserves the Toll House through adaptive re-use.

A. Alignment of Pacific Boulevard Extension

County staff, including staff from the County's Office of Transportation Services (OTS), concur with the Virginia Department of Transportation (VDOT) in their recommendation (dated March 11, 2009) to adjust the alignment of Pacific Boulevard and Russell Branch Parkway to the west and/or south to avoid adversely affecting the Toll House. Relocating the Toll House will compromise its historic context adjacent to both the bridge ruins and original Alexandria-Leesburg Turnpike (Route 7) alignment and therefore, greatly undermine the significance and interpretive value of this historic building. Relocation may also jeopardize the structural integrity of the Toll House. Staff recommends that the present historic location of the Toll House be central to future discussions on the appropriate alignment of this segment of Pacific Boulevard.

Staff recommend the applicant adjust the alignment of Pacific Boulevard and Russell Branch Parkway to the west and/or south to avoid adversely affecting the Toll House. Staff also recommend that the present historic location of the Toll House be central to future discussions on the appropriate alignment of this segment of Pacific Boulevard.

B. Resource Analysis and Documentation

Structure

As stated above, County staff recommend preservation of the Toll House and bridge ruins in their historic context. However, regardless of whether the structure is ultimately preserved in place, as recommended, or relocated, County staff request that the Applicant commit to the completion of a Historic Structures Report (HSR) as defined by the National Park Service Preservation Brief # 43. The HSR will provide the baseline data necessary to make decisions on how best to preserve the resource and convey its history to the residents of the County. The HSR will include the existing condition and structural integrity of the resource and will determine the potential for possible relocation.

Archaeology

As with the recommended HSR, whether or not the Toll House is preserved in place or relocated, a portion of the historic and educational value of the Toll House property will likely come from the archaeological resources associated with the historic use of this property. Limited archaeological investigation of the property is warranted to ascertain whether intact archaeological remains exist. The rear of the house has been disturbed, primarily by the construction of a pool. Also, as part of the widening of Route 7, an earthen retaining wall was constructed per a 1991 Memorandum of Agreement between VDOT and VDHR which aimed to minimize encroachment of the expanded roadway embankment on the remains of the Broad Run Bridge ruins. The grounds surrounding the front and the sides of the structure may be intact and therefore could yield significant information on commerce and transportation in early 19th century Loudoun County. Staff recommends that the Applicant coordinate with the County Archaeologist to determine the archaeological potential of the property prior to any alterations to the Toll House structure and prior to any ground disturbance on the property.

Staff requests the Applicant commit to the completion of a Historic Structures Report (HSR) as defined by the National Park Service Preservation Brief # 43, to provide the baseline data necessary to make decisions on how best to preserve the resource and convey its history to the residents of the County. Staff also recommend that the Applicant coordinate with the County Archaeologist to determine the archaeological potential of the property prior to any alterations to the Toll House structure and prior to any ground disturbance on the property.

C. Preservation and Adaptive Re-Use

The PRCS staff is currently working on the Broad Run Trail Corridor Plan, in which preserving and rehabilitating the Toll House for use as a trailhead will be a key planned component. Preserving the Toll House in its original location also gives greater credibility to the planned Vestal's Gap Road Park and future interpretation of historic westward expansion, settlement, and commerce as proffered as a part of Dulles Town Center rezoning currently under review (ZMAP 2007-0001).

Specifically, staff recommends rehabilitation and adaptive reuse of the Toll House as a public trailhead for the future Broad Run Trail and Potomac Heritage National Scenic Trail. This shall include, but not be limited to, dedication of the structure and parcel to the County as a public historic park, the rehabilitation of the structure as recommended in the HSR, the inclusion of interpretive and information signage to be determined by PRCS, the inclusion of public restrooms, the inclusion of a small parking lot, and construction of a historically appropriate pedestrian bridge crossing the Broad Run as part of the Potomac Heritage National Scenic Trail that includes reconstruction and/or stabilization of the existing abutments and incorporates them into the bridge design.

Rehabilitation and improvements shall be subject to applicable federal (National Park Service), state (Department of Historic Resources, Department of Conservation and Recreation and Department of Environmental Quality), and local (PRCS and HDRC) standards, and they shall be completed and the property conveyed within 5 years of application approval. It is noteworthy that as part of the planning process for the expansion of eastbound Route 7 in 1990-91 there were discussions about acquiring the Toll House and bridge ruins for use as a public park as part of the then "Greenways and Trails Program" in recognition of the historic significance of this resource (attachment).

Mothballing

The Toll House is currently vacant and will remain vacant for a period of time even if the Applicant proffers preservation and adaptive re-use of the structure. Therefore, the structure could degrade and be subject to vandalism. To ensure that the building does not suffer from demolition by neglect in this interim period, the structure should be adequately protected through "mothballing." There are varying degrees of mothballing outlined in the National Park Service's Preservation Brief #31. If the ultimate re-use of the building is a trailhead/interpretive area, mothballing will be a fairly simple, but necessary process which will include boarding windows securely, securing entrances and preventing internal water damage through leaks, frozen pipes, etc.

Staff recommends rehabilitation and adaptive reuse of the Toll House as a public trailhead for the future Broad Run Trail and Potomac Heritage National Scenic Trail. This shall include, but not be limited to, dedication of the structure and parcel to the County as a public historic park, the rehabilitation of the structure as recommended in the HSR, the inclusion of interpretive and information signage to be determined by PRCS, the inclusion of public restrooms, the inclusion of a small parking lot, and construction of a historically appropriate pedestrian bridge crossing the Broad Run as part of the Potomac Heritage National Scenic Trail that includes reconstruction and/or stabilization of the existing abutments and incorporates them into the bridge design. Rehabilitation and improvements shall be subject to applicable federal (National Park Service), state (Department of Historic Resources, Department of Conservation and Recreation and Department of Environmental Quality), and local (PRCS and HDRC) standards, and they shall be completed and the property conveyed within 5 years of application approval. To ensure that the building does not suffer from demolition by neglect in this interim period, staff also recommend the applicant commit to adequately protecting the structure through "mothballing," using varying degrees of mothballing as outlined in the National Park Service's Preservation Brief #31.

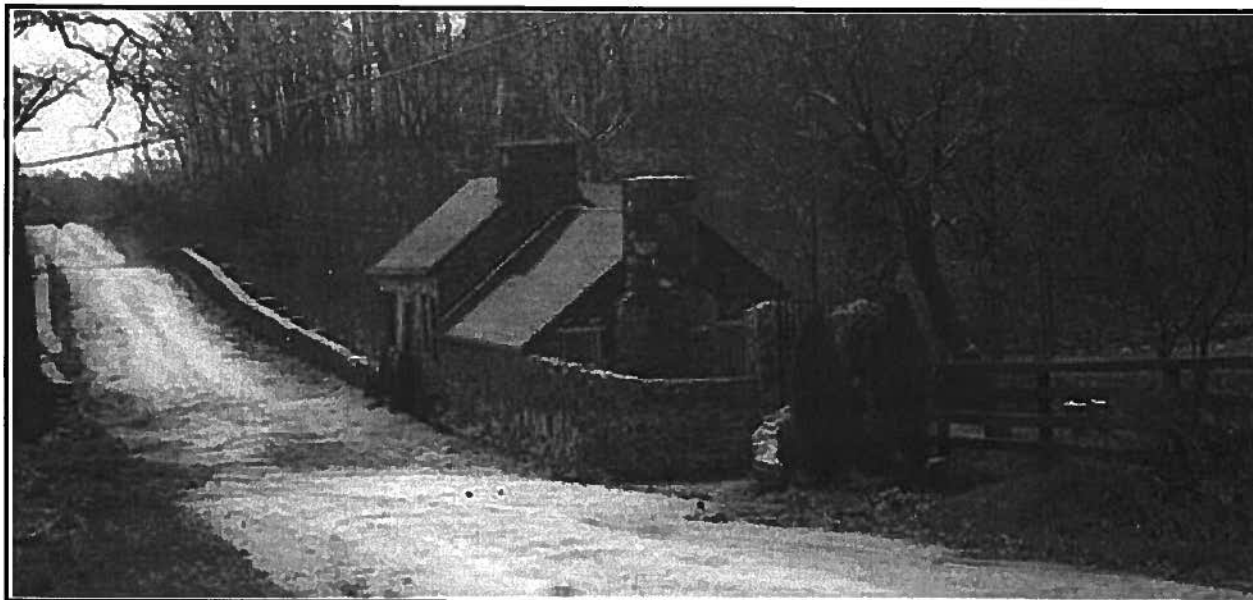
Recommendations

In summary, staff recommends that the following actions be considered to achieve the preservation and adaptive re-use of the Broad Run Toll House and Bridge Ruins and that future proffer language specify these actions:

1. Include the Toll House property (PIN 040-39-8734) as part of ZMAP 2008-0021;
2. Move the alignment of Pacific Boulevard west or south to avoid the Toll House;
3. Preserve the Toll House and a portion of the bridge ruins in place;
4. Complete a Historic Structures Report (HSR) for the Toll House;
5. Coordinate with the County Archaeologist to assess the potential for significant archaeological resources on the property;
6. Pursue adaptive re-use of the Toll House as a public trail head along the Broad Run Trail and convey the property to the County;
7. Mothball the Toll House as soon as possible to protect against decay and vandalism.

Should extenuating engineering circumstances or a decision by the Board of Supervisors result in an alignment of Pacific Boulevard which does not avoid the Toll House, County staff recommends that the structure be relocated to an appropriate location on the west side of Broad Run that would provide the least amount of compromise to the historic context of the structure and bridge. Again, exterior alterations and relocation of the Toll House and its proposed new location would still require approval by the HDRC.

Finally, County staff requests a meeting with the Applicant to further discuss these recommendations in more detail.



Toll House and Bridge circa 1953 (courtesy VDHR)



Toll House – 2008



Broad Run Bridge Ruins- 1990 (courtesy VDHR)

County of Loudoun
Department of Planning
MEMORANDUM

DATE: April 17, 2009

TO: Judi Birkitt, Project Manager, Land Use Review

FROM: Heidi Siebentritt, Historic Preservation Planner, Community Information and Outreach

SUBJECT: ZMAP 2008-0021 Kincora Village Center

Background

The applicant is requesting a Zoning Map Amendment (ZMAP) of an approximately 336.64 acre property located in the southwest quadrant of the Route 7 and Route 28 interchange (subject property). The subject property is located within the Route 28 Tax District and is currently zoned Planned Development-Industrial Park (PD-IP) under the 1972 Zoning Ordinance. The ZMAP application requests that the property be re-zoned to Planned Development- Mixed Use Business (PD-MUB).

Staff notes that a special exception application (SPEX 2008-0054) for a property adjacent to the subject property to permit a minor league ball field and auxiliary uses is currently under County review.

Plan Compliance

The subject property is governed by the policies of the Revised General Plan and the Heritage Preservation Plan.

Analysis

A Phase 1 archaeological survey was conducted on the 420-acre A.S. Ray property. The survey report, dated March 2001, was prepared by Thunderbird Archeology. The subject property represents the majority of the surveyed tract of land. The survey report was first submitted to the County for review as part of ZMAP 2006-0016, Kincora, which was denied by the Board of Supervisors on November 14, 2007. Ten archaeological sites previously identified by ground surface examination were re-identified and located during the 2001 survey, and six additional sites were located. Of the sixteen recorded sites, two sites were found to be potentially significant, warranting impact mitigation.

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Archaeological Resources

Site 44LD421 was identified adjacent to Route 28 (Sully Road). This site is the historic Kilgour/Hummer Cemetery. In early 2007, the human remains from the cemetery were exhumed and re-interred at the Chestnut Grove Cemetery in Herndon. Therefore, this resource has been removed and no further impact mitigation is necessary.

Site 44LD729 was also located during the 2001 Phase 1 archaeological survey. A Phase 2 evaluation of the site was conducted and a report prepared in January 2008 and submitted to the County with the subject application. Site 44LD729 has been interpreted as the remains of an 18th century domestic site likely associated with a tenant farmer of poor or moderate means. Artifact locations and densities and the presence of large, intact pit feature suggest that the 44LD729 represents the remains of at least one building. The consultant has recommended this site to be eligible for listing in the National Register of Historic Places. Therefore, avoidance of the site or Phase 3 excavation of the site is warranted.

The applicant's Statement of Justification (page 9) states that Phase 3 excavation of site 44LD729 is planned and that a Memorandum of Understanding (MOU) outlining the scope of work and testing methodology has been executed with the Virginia Department of Historic Resources (VDHR). Staff requests a copy of the MOU and a copy of the Phase 3 report (upon completion) for the County file.

Broad Run Toll House and Bridge

The Broad Run Toll House and Bridge (Virginia Department of Historic Resources #53-110) is located north of the project area near the intersection of Route 7 and Route 28. The house and bridge were constructed in 1820 and represent the initiation of Route 7 as a turnpike from Winchester to the port of Alexandria. These resources are landmarks of Loudoun County's early transportation and commerce systems. As such, the toll house and associated stone bridge which spanned the Broad Run until the 1990's, were listed in the National Register of Historic Places as early as 1969. The National Register nomination notes the rarity of this type of resource in the state of Virginia. The stone bridge collapsed in the 1990's. The remnants of the stone bridge trusses and cut stone rubble remain on the site. Although an addition to the house was constructed in the mid 20th century, the original exterior of the stone toll house structure appears to be intact, retaining its historic integrity. A copy of the 1969 National Register nomination for the Broad Run Toll House and Bridge is attached for reference (Attachment 1).

In recognition of the local and national significance of the resource, the County designated the Broad Run Toll House and Bridge as a local historic site district (HS) in 1972. The purpose and intent of historic district designation is the

protection and enhancement of areas of special historic interest or value which reflect the County's heritage (*1972 Zoning Ordinance, Section 750.1.2 and Revised 1993 Zoning Ordinance Section 6-1800*). The effect of such designation is the required review and approval by the County for all exterior alterations to structures within the district, including the proposed demolition or relocation of any structure. County approval is also required for proposed new construction within the HS district (*1972 Zoning Ordinance, Section 750.8 and 750.9 and Revised 1993 Zoning Ordinance, Section 6-1902*). Staff recommends that the applicant contact Department of Planning staff to discuss the HDRC application process at the earliest convenience.

The County's Heritage Preservation Plan states that new development should first and foremost seek to minimize adverse impacts on heritage sites, including historic standing structures and that new development should be sited and designed to be compatible with heritage resources (*Heritage Preservation Plan, Chapter 9, Development Review, Policies 1 and 2*). The Plan further states that heritage sites that have been listed in the National Register of Historic Places and designated as HS districts under the provisions of the zoning ordinance will be considered priority sites for preservation during the development process (*Heritage Preservation Plan, Chapter 9, Development Review, Policy 3*). The County's first priority is the preservation of these resources in the context of their historic settings (*Heritage Preservation Plan, Chapter 9, Policy 2*).

Chapter 10 of the Heritage Preservation Plan provides "Guidelines for the Preservation of Historic Standing Structures." The Heritage Plan states that all new land development applications will be evaluated against these Guidelines (*Heritage Preservation Plan, Chapter 9, Development Review, Policy 9*). Chapter 10 of the Heritage Preservation Plan is attached for reference (Attachment 2). Also attached is the section of the County's Historic District Guidelines relating to the relocation or demolition of structures with historic overlay districts (Attachment 3).

The 1990 widening of Route 7, though not destroying the structures themselves, compromised the historic setting of these structures and increased the difficulty of adaptively re-using the Toll House. Because construction of the remainder of Pacific Boulevard is proposed as part of the subject development application, depending on the ultimate alignment of the road, the Toll House will either be destroyed or further compromised. It is staff's understanding from a conversation with the applicant at a March 30 meeting with referral agencies that the Toll House property is under contract with the applicant. It is critical that the structural condition, historic architectural integrity and historic context of the toll house be assessed and documented. To this end, staff recommends that a Historic Standing Structures Report (HSR) as defined in the National Park Service's Preservation Brief #43, be conducted. The HSR will provide the base line data necessary to make decisions on how best to preserve the resource and to

convey its history to the residents of the County. Preservation Brief #43 is attached for the applicant's reference (Attachment 4).

Coordination with VDHR

The application materials state that permits from the Army Corps of Engineers is required for this project. Because federal permits are needed, the development proposal will be reviewed by the Virginia Department of Historic Resources (VDHR) per Section 106 of the National Historic Preservation Act of 1966 (as amended). Impacts to resources listed in, or eligible for, the National Register of Historic Places may require mitigation per VDHR. Staff recommends that the applicant consult with VDHR as early as possible to ensure that impact mitigation that may be proffered to the County as part of an approval of this application are consistent with VDHR's requirements under Section 106. This recommendation pertains specifically to the Broad Run Toll House property, since the MOU for site 44LD729 has already been addressed.

Recommendation

Staff strongly recommends that the applicant schedule a meeting with staff from the Department of Planning and the Department of Parks, Recreation and Community Services to discuss viable adaptive re-use options to ensure the preservation of this important resource. Staff further recommends the completion of an HSR by a qualified professional for a full and complete assessment of the toll house structure so that informed decisions on the treatment and adaptive re-use of this structure and site can be made.

Staff reiterates that any alteration of the toll house structure, including its relocation or demolition, will necessitate HDRC review and approval. Further, staff recommends early coordination with VDHR on mitigation impact strategies for this resource and requests copies of any pertinent correspondence on this issue to ensure that recommendations and required actions are consistent and or compatible on the county and state level.

Staff respectfully requests a copy of the MOU and Phase 3 archaeological survey report for site 44LD729.

cc: Michael "Miguel" Salinas, Program Manager, CIO
Julie Pastor, AICP, Director

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Type all entries - complete applicable sections)

STATE: Virginia	
COUNTY: Loudoun	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

1. NAME	
COMMON: Broad Run Bridge and Toll House	
AND/OR HISTORIC: Broad Run Bridge and Toll House	

2. LOCATION			
STREET AND NUMBER: At intersection of Rt. 7, Rt. 28, and Broad Run.			
CITY OR TOWN: (Sterling vicinity)			
STATE Virginia	CODE 45	COUNTY: Loudoun	CODE 107

3. CLASSIFICATION		CATEGORY (Check One)		OWNERSHIP		STATUS		ACCESSIBLE TO THE PUBLIC	
<input type="checkbox"/> District	<input checked="" type="checkbox"/> Building	<input checked="" type="checkbox"/> Public	Public Acquisition: <input type="checkbox"/> In Process <input type="checkbox"/> Being Considered		<input checked="" type="checkbox"/> Occupied	<input checked="" type="checkbox"/> Unoccupied		Yes: <input type="checkbox"/> Restricted <input checked="" type="checkbox"/> Unrestricted	
<input type="checkbox"/> Site	<input checked="" type="checkbox"/> Structure	<input checked="" type="checkbox"/> Private			<input type="checkbox"/> Preservation work in progress				<input checked="" type="checkbox"/> No
<input type="checkbox"/> Object		<input type="checkbox"/> Both							
PRESENT USE (Check One or More as Appropriate)									
<input type="checkbox"/> Agricultural	<input type="checkbox"/> Government	<input type="checkbox"/> Park	<input type="checkbox"/> Transportation		<input type="checkbox"/> Comments				
<input type="checkbox"/> Commercial	<input type="checkbox"/> Industrial	<input checked="" type="checkbox"/> Private Residence	<input checked="" type="checkbox"/> Other (Specify) Bridge						
<input type="checkbox"/> Educational	<input type="checkbox"/> Military	<input type="checkbox"/> Religious							
<input type="checkbox"/> Entertainment	<input type="checkbox"/> Museum	<input type="checkbox"/> Scientific							

4. OWNER OF PROPERTY			
OWNER'S NAME: Commonwealth of Virginia - Department of Highways			
STREET AND NUMBER: 1401 E. Broad Street			
CITY OR TOWN: Richmond		STATE: Virginia	
		CODE 45	

5. LOCATION OF LEGAL DESCRIPTION			
COURTHOUSE, REGISTRY OF DEEDS, ETC.: Loudoun County Court House			
STREET AND NUMBER:			
CITY OR TOWN: Leesburg		STATE: Virginia	
		CODE 45	

6. REPRESENTATION IN EXISTING SURVEYS			
TITLE OF SURVEY: Virginia Historic Landmarks Commission Report #53-110			
DATE OF SURVEY: 1969 <input type="checkbox"/> Federal <input checked="" type="checkbox"/> State <input type="checkbox"/> County <input type="checkbox"/> Local			
DEPOSITORY FOR SURVEY RECORDS: Virginia Historic Landmarks Commission			
STREET AND NUMBER: Room 1116, Ninth Street State Office Building			
CITY OR TOWN: Richmond		STATE: Virginia	
		CODE 45	

STATE: Virginia	COUNTY: Loudoun	ENTRY NUMBER	DATE

SEE INSTRUCTIONS

ATT 1

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NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM

(Continuation Sheet)

STATE	
Virginia	
COUNTY	
Loudoun	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

(Number all entries)

4. James R. Eberly (owner of Toll House)
Route 1
Ashburn, Virginia

7. DESCRIPTION

CONDITION	(Check One)					
	<input type="checkbox"/> Excellent	<input type="checkbox"/> Good	<input checked="" type="checkbox"/> Fair	<input type="checkbox"/> Deteriorated	<input type="checkbox"/> Ruins	<input type="checkbox"/> Unexposed
	(Check One)			(Check One)		
	<input type="checkbox"/> Altered	<input checked="" type="checkbox"/> Unaltered	<input type="checkbox"/> Moved	<input checked="" type="checkbox"/> Original Site		

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

Broad Run Bridge and Toll House are both stone objects of considerable simplicity. The bridge itself consists of a double span of arches supported by a central pier and massive abutments on either bank. Conical buttressing flanks the arches and squared-off buttresses support the stone walls on land. The asphalt-covered roadway rises at the center of the bridge span, and the low parapet walls which line this roadway connect to the stone toll house at the western end of the bridge on the south side. The simplicity of the original one-story, three-bay structure changed considerably after its enlargement by three wings, but the old walls are relatively intact. Little original interior fabric remains. The bridge is now owned by the Department of Highways of the Commonwealth of Virginia, while the toll house is now a private residence.

SEE INSTRUCTIONS

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY - NOMINATION FORM**

Broad Run Bridge and Toll House
7. DESCRIPTION *(Continuation Sheet)*

STATE Virginia	
COUNTY Loudoun	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

(Number all entries)

The causeway at the west end of the bridge was damaged by flood in June 1972.

2. SIGNIFICANCE

PERIOD (Check One or More as Appropriate)

- ☐ Pre-Columbian ☐ 16th Century ☐ 18th Century ☐ 20th Century
☐ 15th Century ☐ 17th Century ☒ 19th Century

SPECIFIC DATE(S) (If Applicable and Known)

AREAS OF SIGNIFICANCE (Check One or More as Appropriate)

- | | | | |
|--|---|--|--|
| <input type="checkbox"/> Aboriginal | <input type="checkbox"/> Education | <input type="checkbox"/> Political | <input type="checkbox"/> Urban Planning |
| <input type="checkbox"/> Prehistoric | <input type="checkbox"/> Engineering | <input type="checkbox"/> Religion/Philosophy | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Historic | <input type="checkbox"/> Industry | <input type="checkbox"/> Science | _____ |
| <input type="checkbox"/> Agriculture | <input type="checkbox"/> Invention | <input type="checkbox"/> Sculpture | _____ |
| <input type="checkbox"/> Architecture | <input type="checkbox"/> Landscape Architecture | <input type="checkbox"/> Social/Humanitarian | _____ |
| <input type="checkbox"/> Art | <input type="checkbox"/> Literature | <input type="checkbox"/> Theater | _____ |
| <input checked="" type="checkbox"/> Commerce | <input type="checkbox"/> Military | <input checked="" type="checkbox"/> Transportation | _____ |
| <input type="checkbox"/> Communications | <input type="checkbox"/> Music | | |
| <input type="checkbox"/> Conservation | | | |

STATEMENT OF SIGNIFICANCE

On February 3, 1809, the General Assembly passed an Act Incorporating The Leesburg Turnpike Company for the purpose of building a road from Leesburg to the Little River Turnpike at Alexandria, or for at least ten miles in that direction. The road, which was to be fifty feet wide, was to be paved for only eighteen feet. In February, 1816, an Act creating a "Fund for Internal Improvement" established a fund to consist of shares, held by the Commonwealth, in various turnpikes, canals and banks, and of dividends received from such stock. Thus, the need for better inland communication to promote commerce and travel to the west was recognized by the government.

The work on the Leesburg Pike progressed slowly, but by 1822 the road had been completed to Dranesville, a distance of fourteen miles. One of the toll gates erected at this time may have been at Broad Run Bridge, 5½ miles east of Leesburg, which was constructed as part of the Leesburg Pike. There is reputed to be a stone with an 1820 date on the bridge, and this is a logical date of construction. At least three successive wooden bridges had been erected over Broad Run between 1771 and 1803, but these had all washed away. The stone bridge was in use until 1949 when it was replaced by a concrete and steel bridge.

By 1834 The Leesburg Turnpike Company found itself in debt due to decreased tolls and an increase in the cost of repairs. The flood of September, 1843, which washed away the bridge over Goose Creek, and the completion of the Chesapeake and Ohio Canal combined to doom the company. At the beginning of the Civil War, the road was abandoned as a toll road.

One of several stone bridges remaining in Virginia, Broad Run Bridge and Toll House are probably the only such extant combination. In addition to being such a unique survival, they form an extremely picturesque design which gains in interest, especially to contemporary eyes, by their strict functionalism and structural integrity.

9. MAJOR BIBLIOGRAPHICAL REFERENCES

Files of the Virginia Department of Highways. (Mr. E. W. Turner, Landscape Engineer)
Osborne, Mrs. Frank, "Broad Run Bridge," Virginia Highway Bulletin (March 1949).

10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY			OR	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES		
CORNER	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	
	Degrees Minutes Seconds	Degrees Minutes Seconds		Degrees Minutes Seconds	Degrees Minutes Seconds	
NW	° ' "	° ' "		39 ° 02 ' 47 "	77 ° 26 ' 00 "	
NE	° ' "	° ' "				
SE	° ' "	° ' "				
SW	° ' "	° ' "				

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: Less than 10 acres.

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE

11. FORM PREPARED BY

NAME AND TITLE: <u>Staff, Virginia Historic Landmarks Commission, James W. Moody, Jr., Director</u>	
ORGANIZATION <u>Virginia Historic Landmarks Commission</u>	DATE <u>November 13, 1969</u>
STREET AND NUMBER: <u>Room 1116, Ninth Street State Office Building</u>	
CITY OR TOWN: <u>Richmond</u>	STATE <u>Virginia</u> CODE <u>45</u>

12. STATE LIAISON OFFICER CERTIFICATION

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National ☐ State ☒ Local ☐

Name

Dr. Edward P. Alexander

Dr. Edward P. Alexander, Chairman
Title Virginia Historic Landmarks Commission

Date December 2, 1969

NATIONAL REGISTER VERIFICATION

I hereby certify that this property is included in the National Register.

Chief, Office of Archeology and Historic Preservation

Date _____

ATTEST:

Keeper of The National Register

Date _____

SEE INSTRUCTIONS

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UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICENATIONAL REGISTER OF HISTORIC PLACES
PROPERTY MAP FORM

(Type all entries - attach to or enclose with map)

STATE	
Virginia	
COUNTY	
Loudoun	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

SEE INSTRUCTIONS

1. NAME			
COMMON: Broad Run Bridge and Toll House			
AND/OR HISTORIC: Broad Run Bridge and Toll House			
2. LOCATION			
STREET AND NUMBER:			
At intersection of Rt. 7, Rt. 28, and Broad Run.			
CITY OR TOWN:			
(Sterling vicinity)			
STATE:	CODE	COUNTY:	CODE
Virginia	45	Loudoun	107
3. MAP REFERENCE			
SOURCE:			
U.S.G.S. map 7.5', quadrangle Sterling, Va.-Md.			
SCALE: 1:24000			
DATE: 1952			
4. REQUIREMENTS			
TO BE INCLUDED ON ALL MAPS			
1. Property boundaries where required.			
2. North arrow.			
3. Latitude and longitude reference.			

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICENATIONAL REGISTER OF HISTORIC PLACES
PROPERTY PHOTOGRAPH FORM

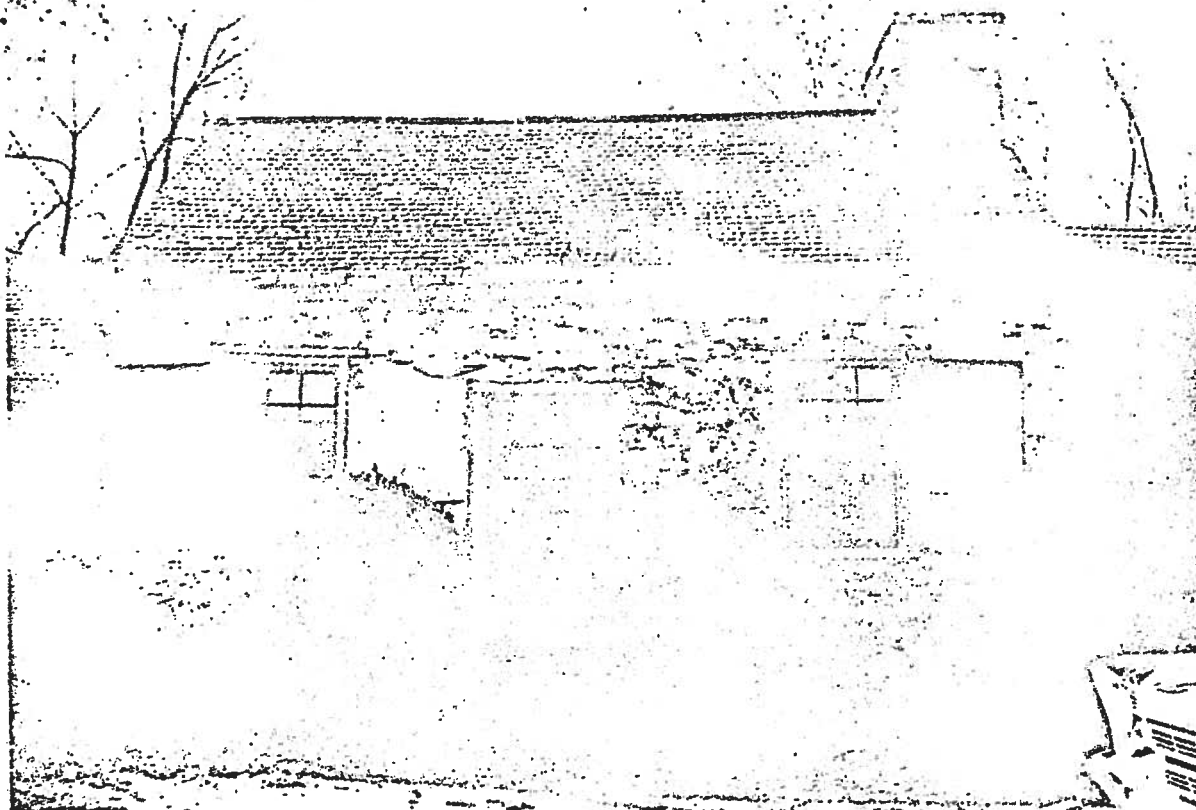
(Type all entries - attach to or enclose with photograph)

STATE	
Virginia	
COUNTY	
Loudoun	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

SEE INSTRUCTIONS

1. NAME			
COMMON: Broad Run Bridge and Toll House			
AND/OR HISTORIC: Broad Run Bridge and Toll House			
2. LOCATION			
STREET AND NUMBER:			
At intersection of Rt. 7, Rt. 28, and Broad Run.			
CITY OR TOWN:			
(Sterling vicinity)			
STATE:	CODE	COUNTY:	CODE
Virginia	45	Loudoun	107
3. PHOTO REFERENCE			
PHOTO CREDIT: Virginia Historic Landmarks Commission			
DATE OF PHOTO: 1969			
NEGATIVE FILED AT: Virginia Historic Landmarks Commission			
Richmond, Virginia			
4. IDENTIFICATION			
DESCRIBE VIEW, DIRECTION, ETC.			
View of Broad Run Bridge from the Northeast, with Toll House at far right.			





ATE

ODE

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES

PROPERTY PHOTOGRAPH FORM

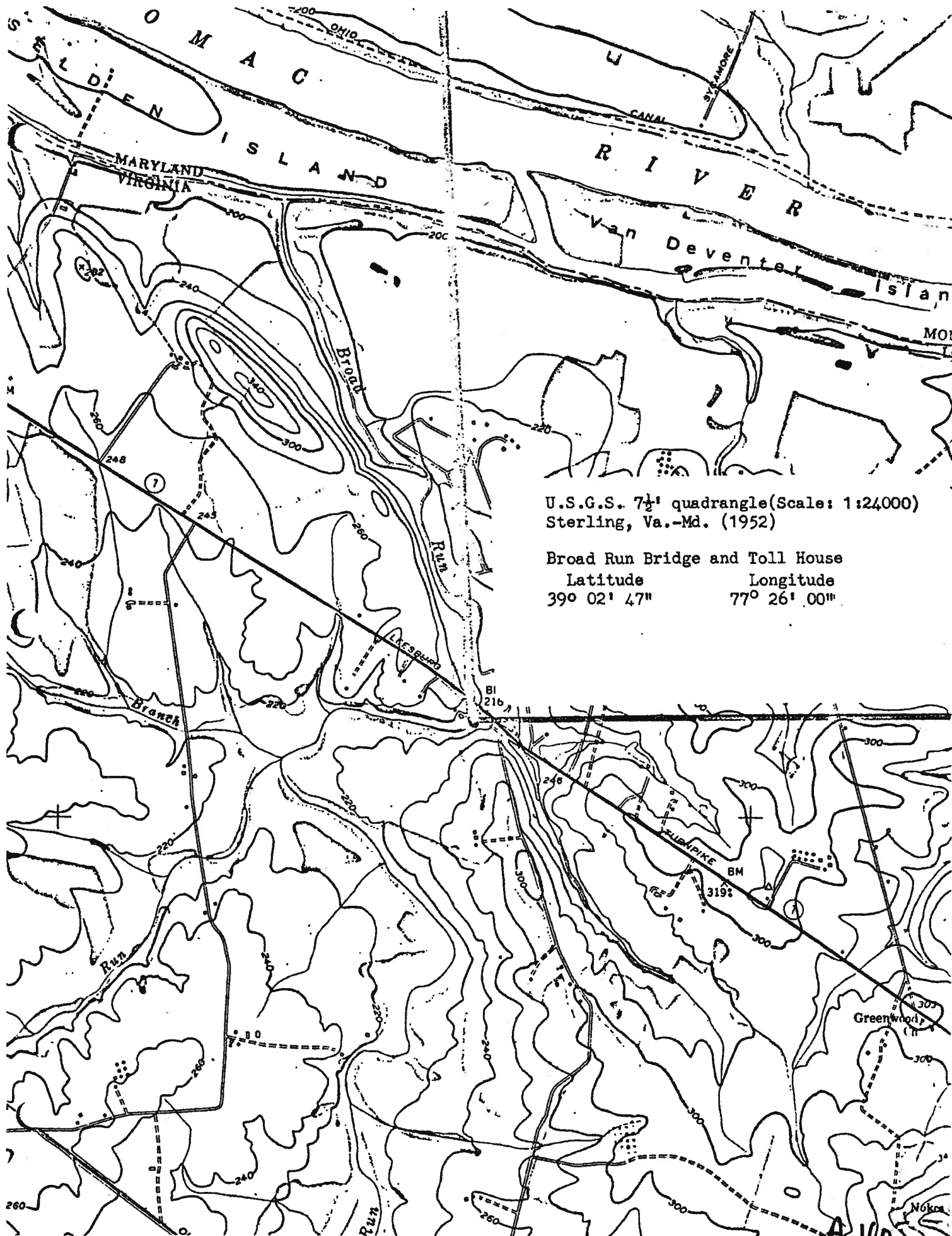
(Type all entries - attach to or enclose with photograph)

STATE Virginia	
COUNTY Loudoun	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

SEE INSTRUCTIONS

1. NAME			
COMMON: Broad Run Bridge and Toll House			
AND/OR HISTORIC: Broad Run Bridge and Toll House			
2. LOCATION			
STREET AND NUMBER: At intersection of Rt. 7, Rt. 28, and Broad Run.			
CITY OR TOWN: (Sterling vicinity)			
STATE: Virginia	CODE 45	COUNTY: Loudoun	CODE 107
3. PHOTO REFERENCE			
PHOTO CREDIT: Virginia Historic Landmarks Commission			
DATE OF PHOTO: 1969			
NEGATIVE FILED AT: Virginia Historic Landmarks Commission Richmond, Virginia			
4. IDENTIFICATION			
DESCRIBE VIEW, DIRECTION, ETC. View of Toll House from the North.			

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U.S.G.S. 7½' quadrangle (Scale: 1:24,000)
Sterling, Va.-Md. (1952)

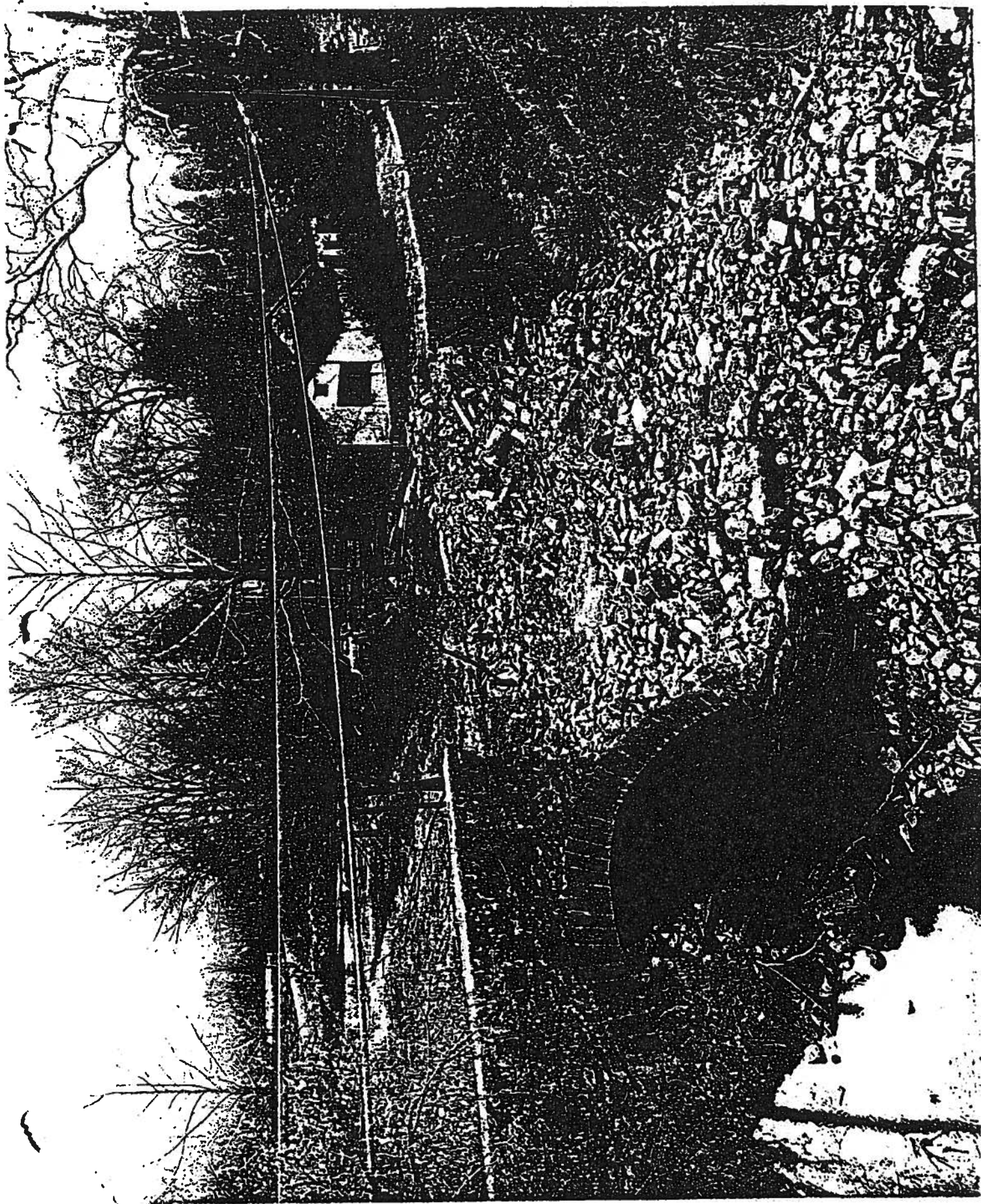
Broad Run Bridge and Toll House
Latitude Longitude
39° 02' 47" 77° 26' 00"

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
NATIONAL REGISTER OF HISTORIC PLACES
PROPERTY PHOTOGRAPH FORM

(Type all entries - attach to or enclose with photograph)

1. NAME		
COMMON	AND/OR HISTORIC	NUMERIC CODE (Assigned by NPS)
Broad Run Bridge and Toll House		
2. LOCATION		
STATE	COUNTY	TOWN
Virginia	Loudoun	(Sterling vicinity)
STREET AND NUMBER		
At intersection of Route 7, Route 28, and Broad Run.		
3. PHOTO REFERENCE		
PHOTO CREDIT	DATE	NEGATIVE FILED AT
William Edmund Barrett	Summer 1972	William Edmund Barrett, Washington, D.C.
4. IDENTIFICATION		
DESCRIBE VIEW, DIRECTION, ETC.		

Copy of Summer 1972 View from Northeast.



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*Goose Creek Meeting House, Lincoln, Virginia
Photo courtesy of: Paul Glenshaw*

Chapter 10

Design and Preservation Guidelines: Guidelines for the Preservation of Historic Standing Structures

ATT 2

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Principles

The following guidelines outline five strategies for the preservation of historic standing structures. The guidelines are derived predominately from the standards and guidelines of the National Park Service. These strategies are prioritized in the order listed below.

1. Preservation

- a. The original use/use type of the structure should be preserved. Structural stabilization, rehabilitation and/or restoration should be executed as necessary to the Secretary of the Interior's Standards for the Treatment of Historic Properties and the Secretary of the Interior's Standards for Rehabilitation (36 CFR 67).
- b. Historic structures should be protected in the context of their natural and/or cultural settings. The County will develop a package of incentives to encourage property owners to limit development within this area.
- c. New developments that extend into the viewshed and/or setting of a historic structure will be reviewed for compatibility with the architecture and associated landscape of the historic structure.
- d. Architectural Compatibility Guidelines: In reviewing new land development applications for compatibility with historic structures, the following factors should be taken into consideration:
 - i. Building mass and height in relation to that of surrounding development within its viewshed
 - ii. Roof form
 - iii. The setback and placement of the building on the lot in relation to the average setback and placement of the nearest adjacent and opposite buildings within the viewshed of the historic resource(s)
 - iv. Building orientation
 - v. Number, placement and proportion of façade fenestration, including primarily the doors and windows
 - vi. Size, shape and proportion of entrance features such as porches
 - vii. Choice and color of exterior construction materials
 - viii. Architectural detailing
 - ix. Landscape elements such as vegetation, fences, walkways, etc.

2. Adaptive Re-use

- a. While it may not always be possible to preserve or promote the original use for which a historic structure was constructed, the County recognizes the value of the building itself as a historic resource and calls for its preservation through adaptive re-use.
- b. The proposed re-use should be consistent with and implement the land use policies for the area as defined in the County's Comprehensive Plan.
- c. The historic landscape associated with the structure should be protected to preserve the resource in its context.
- d. The proposed use should generally be compatible with the surrounding landscape and development patterns. For instance, any additional parking, lighting or signage requirements necessitated by the re-use of the historic structure should be appropriately sized and/or shielded

to minimize any adverse impacts on the character of the surrounding area. The County will amend its regulatory documents to ensure that the minimum parking, signage, lighting and other design requirements do not adversely impact the historic character of an area.

3. Record and Relocate

- a. The proposed use of a relocated structure should be compatible with the land use policies of the receiving site and surrounding uses.
- b. The site to which a historic structure is relocated/receiving site should meet the following established criteria:

Moving Historic Standing Structures: Criteria for Receiving Sites

- i. Receiving sites should ensure that the historic resource is compatible with its new landscape. (Refer to the section on Architectural Compatibility Guidelines)
- ii. Locate the structure where it is similar in architecture and period to the existing buildings.
- iii. Locate the building within the same historic district or a historic district with a similar architectural period.
- iv. Retain all the important character defining architectural features that contribute to the historic authenticity of the building.
- v. Landscape the site with indigenous plantings similar to those at the original site.

4. Record and Dismantle

- a. Dismantle a building if:
 - i. The building is structurally unstable
 - ii. It can be shown that at least 60 percent of the structural integrity of the building has been compromised based on current structural engineering standards
 - iii. Incompatible additions or modifications over time have depleted the historic value or integrity of the structure.
- b. Dedicate or sell building materials salvaged from historic structures to the County, or another public or private agency/organization that is involved in the preservation field.
- c. Include with these materials a written history of the structure from which the materials were salvaged.

5. Record and Demolish

- a. Demolish a building if:
 - i. The building is structurally unstable.
 - ii. It can be shown that at least 60 percent of the structural integrity of the building has been compromised based on current structural engineering standards
 - iii. Incompatible additions or modifications over time have depleted the historic value or integrity of the structure.

Guidelines for the Delineation of Historic Settings

Historic settings comprise both natural and cultural elements. To assist in the delineation and preservation of these settings, the Preservation Plan calls for the definition of two components of settings: the 'Viewshed' and the 'Resource Setting.'

Viewsheds may be defined simply as the foreground of the resource. The definition of resource settings is more complex. The resource setting of a historic structure includes the historic landscape associated with the structure, including the foreground and background or the backdrop against which the structure is viewed. The viewshed may be considered a component of the resource setting.

1. Viewshed

- a. The viewshed of a historic structure or complex is generally defined as the foreground of the primary structure(s) to the public right-of-way that serves as the primary access to the site.
- b. In the case of a historic district or a landscape such as a battlefield, the viewshed should include the views to and from all public rights-of-way adjacent to the district or landscape.
- c. The viewshed should be protected from at least one point on the public right-of-way that serves as the primary access to the site.
- d. Some historic properties are located in less visible areas of the County from the perspective of heritage tourism and public access. These sites are typically located away from major travel corridors, nestled in remote corners of the county, etc. In such areas that are typically not frequented by tourists or the general public, the viewsheds may be terminated at the property boundary and not extend to the public right-of-way.

2. Resource Setting

- a. Protect the historic resource in the context of their historic setting that includes both the natural and cultural landscape elements on the property.
- b. The resource setting is the immediate foreground and background of the resource and includes the following elements:
 - All contributing structures
 - Landscape elements such as tree lines, driveways, historic roadbeds, gardens, walls and fences associated with the structure.
- c. The resource setting should be protected from at least one point on the public right-of-way that serves as the primary access to the site. The setting will include all or part of the viewshed as defined above.
- d. Include all contributing structures in the definition of the setting. If this is not feasible, focus on the primary structure.
- e. Applicants should identify contributing landscape elements, define the boundaries of the resource settings and assess their historic significance within the scope of a Context Analysis Report. The Context Analysis Report should also identify the viewing point(s) and include a definition and analysis of the areas visible from these viewing points on the public right-of-way.

- f. Qualified County staff and/or the Heritage Commission will review applications requesting to modify the historic settings. The modified setting and the materials should not detract from the historic authenticity of the resource. Characteristics such as the height, density and species/species composition of vegetation, design, material and layout of landscape elements such as stone walls and/or the architectural compatibility of buildings intended to redefine the natural boundaries of viewsheds should be considered in the review.

3. Buffer Guidelines

In developing buffers around historic resources to protect them from incompatible development patterns or to modify the boundaries of a historic setting or viewshed, the following guidelines will be followed.

- a. A historic structure or complex should be appropriately buffered from surrounding development when the structure or complex cannot be protected in its natural or cultural setting or the historic landscape cannot be preserved in its entirety.
- b. Buffers may serve to define or direct views to and from the resource. They may also be used to define narrower boundaries for the viewshed or resource setting of a historic structure and shield the historic resource from incompatible surrounding developments.
- c. Buffers may consist of vegetation or be constructed out of traditional landscape elements such as stone walls.
- d. These buffers should be protected through perpetual open space easements.
- e. Applications should be reviewed to ensure that the design, layout and choice of materials for the buffer maintain or enhance the historic authenticity of the resource.

Development Siting Guidelines

Application

Development siting guidelines are intended to mitigate the impacts of new development on the historic and cultural resources and landscapes of Loudoun County. These guidelines will apply to all new developments proposed within the viewshed or resource setting of a historic structure, cultural landscape or historic district. The historic significance of a resource will be determined through the Phase-1 Report. The development siting guidelines will also apply to all new developments proposed within the viewsheds of designated heritage corridor, including Virginia Byways, State Scenic Rivers and mountain ridges.

1. Site Development

- a. Retain natural site contours
- b. Avoid placing structures on ridgelines or hilltops. Structures should follow the natural topography unless sound engineering standards suggest that it is not feasible.

2. Site Layout

- a. Incorporate existing features such as trees, hedgerows, walls and fences into the design of new building sites in order to blend with the surrounding landscape.

- b. Locate new buildings in such a way that the natural contours and vegetation screen them from the historic resource.
- c. Orient buildings in a coherent relationship to each other with one or more organizing elements such as a park, civic or community center, stream corridor or access road.
- d. Face buildings towards the public right-of-way. Exceptions to this guideline will be considered on a case-by-case basis. This rule may be waived if for instance, buildings face each other across a pedestrian pathway, a green, square, etc.

3. Building Design

- a. Building form and orientation should enhance and/or direct existing views.
- b. Break down the building mass into smaller units, except for uses that are characterized by large buildings such as barns.
- c. The design should establish a hierarchy in the building mass, with the smaller masses located closer to the public right-of-way.
- d. The design should be visually compatible with adjoining historic properties. This does not necessarily mean that the architectural style of the historic structure should be duplicated.
- e. Designs associated with national franchises or chains proposed within the viewshed of historic resources should be subject to review by the Heritage Commission to ensure their consistency with established architectural compatibility standards.
- f. Avoid large expanses of blank walls. Modify surface planes through recessions, projections, introduction of fenestration, variations in building materials, color, texture, etc. Exceptions may be allowed in uses that are designed in accordance with traditional architectural principles, such as barns.

4. Transportation and Parking

- a. Reduce the number of curb cuts by consolidating site access with shared, well-defined entrances.
- b. Avoid large expanses of parking lots. Break parking areas into smaller units. Landscape parking areas to minimize the visual and environmental impacts of impervious surfaces.
- c. Avoid placing parking areas in front of buildings. Distribute parking spaces to the sides and rear of buildings.

5. Services

- a. Locate storage and service areas away from public view and screen them with plant materials and/or berms, as necessary.

6. Towns and Villages

- a. When developing within a town, its Joint Land Management Area or a village, the development should be compatible with the predominant development pattern within the town or village.

- b. The primary factors that should be considered in determining the compatibility of a proposed development include density, street layout, building siting, mass, form and orientation.



*Late 18th Century House, Cooksville
Lost to demolition*

CHAPTER TEN - GUIDELINES FOR DEMOLITION AND MOVING



Left susceptible to invasive vegetation, vermin, and weather, this structure may soon be beyond rehabilitation.

A. INTRODUCTION

Historic buildings are irreplaceable community assets. Once they are gone, they are gone forever. With each successive demolition, the integrity of a district is further eroded. The loss of even one building creates a noticeable gap in the historic fabric of the villages and rural areas.

The HDRC is given the responsibility of reviewing Certificates of Appropriateness (CAPP) to raze, demolish, move or relocate any historic landmark, building, or structure in Section 6-307 and the authority to do so in Section 6-1900 of the Zoning Ordinance. The HDRC will consider most applications for Certificates of Appropriateness for partial demolition as exterior alterations rather than demolition.

B. DEMOLITION

Through the adoption of these guidelines by the Board of Supervisors, the HDRC will use the criteria listed below in evaluating the appropriateness of requests for demolition of historic structures, sites, and objects. An application for demolition will be approved if the preservation of a structure, site, or object is found to be either physically or economically unfeasible under the provisions of the Zoning Ordinance.



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CHAPTER TEN - GUIDELINES FOR DEMOLITION AND MOVING

B. DEMOLITION, continued

1. Demolition Criteria

A decision by the Committee approving or denying a CAPP for the demolition of any historic landmark, building, or structure shall be guided by:

- a. The historic, scenic, cultural, aesthetic or architectural significance of the building, structure, site, or object.
- b. The importance of the historic structure, site, or object to the ambiance of the district.
- c. The difficulty or the impossibility of reproducing such a building, structure, site, or object because of its design, texture, material, detail, or unique location.
- d. Whether the historic structure, site, or object is one of the last remaining examples of its kind in the district.
- e. Whether there are definite plans for reuse of the property if the proposed demolition is carried out, and what the effect of those plans on the character of the surrounding area would be.
- f. Whether reasonable measures can be taken to save the historic structure, site, or object from collapse.
- g. Whether the historic structure, site, or object is capable of earning reasonable economic return on its value.
- h. The condition of the structure and its probable life expectancy.
- i. Whether or not the proposed demolition could potentially affect adversely other historic buildings or the character of the historic district.
- j. The reason for demolishing the structure and whether or not alternatives exist.
- k. Whether or not relocation of the structure would be a practical and preferable alternative to demolition.
- l. The public necessity of the proposed demolition.
- m. The public purpose or interest in the land or building(s) to be protected.

■ GUIDELINES

1. Demolish a historic structure only after all preferable alternatives have been exhausted.
2. Document the building thoroughly through photographs and measured drawings. File this information with the Loudoun County Department of Planning and the Virginia Department of Historic Resources.
3. Maintain any empty lot appropriately so that it is free of hazards and trash and is well tended if the site is to remain vacant for any length of time.

CHAPTER TEN - GUIDELINES FOR DEMOLITION AND MOVING

C. MOVING

The moving of any building from its original site should be avoided if at all possible. Once a building has been moved from its original site, it loses its association with the site, and thus loses its place in time. Each of Loudoun County's Historic and Cultural Conservation Districts is a unique entity, with a variety of building traditions that represent the long history of development in the county.

Moving a building should be considered only after it is determined that, should it remain at its original site, it would meet sure demolition. All other avenues should be explored if the purpose is the preservation of the structure. If there is no other option to save a building from demolition, careful plans should be undertaken to find a suitable site for the structure.

The first choice for relocation should be a vacant site in the same historic district. Such a site will allow the building to continue to contribute to the character of the district and help to ensure compatibility with existing structures. If the building must be moved outside of the historic district, a suitable site should be chosen after consulting *Chapter 4: Guidelines for New Construction*.

Since the relocation of a historic structure is a rare occurrence in a historic district, the following *criteria* may serve as a guide for both the property owner and the HDRC in a discussion of the relocation request.

I. Moving Criteria

A decision by the HDRC approving or denying a Certificate of Appropriateness (CAPP) for the relocation of a historic structure, or object, shall be guided by:

- a. The historic, scenic, cultural, aesthetic or architectural significance of the building, structure, site, or object.
- b. The importance of the historic structure, site, or object to the ambiance of a district.
- c. Whether there are definite plans for the property to be vacated and what the effect of those plans on the character of the surrounding area will be.
- d. Whether the historic structure or object can be moved without significant damage to its physical integrity.
- e. Whether the proposed relocation area is compatible with the scenic, cultural, aesthetic, historical, and architectural character of the building, structure, site, or object.
- f. The public necessity of the proposed move.
- g. The public purpose or interest in the land or building(s) to be protected.
- h. The effect of the vacant lot on the continuity of the district and its character.
- i. The condition of the structure and its probable life expectancy.
- j. The view of the structure from a public street.
- k. Whether relocation is the only practical means of saving the structure from demolition.

■ GUIDELINES

1. Move buildings only after all alternatives to retention have been examined, but prior to demolition.
2. Seek guidance from the Department of Planning for information about moving buildings and documenting the building on its original site before undertaking the move.
3. Contact the Virginia Department of Historic Resources for assistance prior to moving the building if there is a desire for it and the district to remain listed on the Virginia Landmarks Register and the National Register of Historic Places.
4. Photograph the building and the site thoroughly and also measure the building if the move will require substantial reconstruction.
5. Assess the building's structural condition in order to minimize any damage that might occur during the move.
6. Select a contractor who has experience in moving buildings and check references with other building owners who have used this contractor.
7. Secure the building from vandalism and potential weather damage before and after its move.
8. Improve the empty lot in a manner consistent with other open space in the historic district if the site is to remain vacant for any length of time.



43 Preservation Briefs

Technical Preservation Services

National Park Service
U.S. Department of the Interior

Preservation Brief 43 The Preparation and Use of Historic Structure Reports

Deborah Slaton

- » Introduction
- » Guiding the Treatment of Significant Historic Properties
- » When to Prepare the Report
- » Commissioning the Report
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- » Report Production and Availability
- » Summary



A NOTE TO OUR USERS: The web versions of the **Preservation Briefs** differ somewhat from the printed versions. Some illustrations are new, captions are simplified, illustrations are typically in color rather than black and white, and some complex charts have been omitted.

Introduction

A historic structure report provides documentary, graphic, and physical information about a property's history and existing condition. Broadly recognized as an effective part of preservation planning, a historic structure report also addresses management or owner goals for the use or re-use of the property. It provides a thoughtfully considered argument for selecting the most appropriate approach to treatment, prior to the commencement of work, and outlines a scope of recommended work. The report serves as an important guide for all changes made to a historic property during a project—repair, rehabilitation, or restoration—and can also provide information for maintenance procedures. Finally, it records the findings of research and investigation, as well as the processes of physical work, for future researchers.

A historical "first." The first historic structure report prepared in the United States, *The Moore House: The Site of the Surrender-Yorktown*, was written by Charles E. Peterson of the National Park Service in the early 1930s. In the decades since the Moore House report was completed, preservation specialists commissioned by owners and managers of historic properties have prepared thousands of reports of this type. Similar studies have also been used for many years as planning tools in France, Canada, Australia, and other countries, as well as in the United States. Although historic

structure reports may differ in format, depending upon the client, the producer of the report, the significance of the structure, treatment requirements, and budgetary and time restrictions, the essential historic preservation goal is the same.

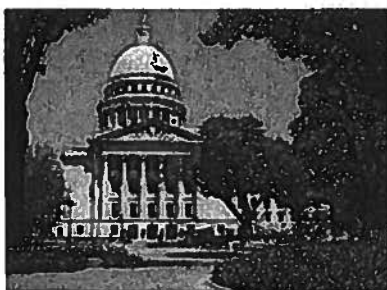
"Just as an art conservator would not intervene in the life of an artistic artifact before obtaining a thorough knowledge of its history, significance, and composition, so those engaged in the preservation of buildings...should proceed only from a basis of knowledge. Too often in the past, the cultural integrity of countless buildings...has been compromised by approaches to restorations grounded on personal whim, willful romanticism, and expedient notions of repair...The preparation of a historic structure report is the first step in adopting a disciplined approach to the care of a historic building." (From the introduction to *The University of Virginia, Pavilion 1, Historic Structure Report*, Mesick Cohen Waite Hall Architects, 1988.)

In response to the many inquiries received on the subject, this Preservation Brief will explain the purpose of historic structure reports, describe their value to the preservation of significant historic properties, outline how reports are commissioned and prepared, and recommend an organizational format. The National Park Service acknowledges the variations that exist in historic structure reports and in how these reports address the specific needs of the properties for which they have been commissioned. Thus, this Brief is written primarily for owners and administrators of historic properties, as well as architects, architectural historians, and other practitioners in the field, who have limited experience with historic structure reports. It also responds to the requests of practitioners and owners to help define the scope of a historic structure report study.



In the introduction to the first historic structure report in this country, Charles E. Peterson of the National Park Service wrote in 1935, "any architect who undertakes the responsibility of working over a fine old building should feel obligated to prepare a detailed report of his findings for the information of those who will come to study it in future years." Since then, thousands of historic structure reports (HSRs) have been prepared to help guide work on historic properties. Photo: National Parks and Conservation Association.

Guiding the Treatment of Significant Historic Properties



Historic structure reports are prepared for many different types of structures with various intended uses. Examples include courthouses and state capitols still serving their historic function, such as the Wisconsin State

A historic structure report is generally commissioned by a property owner for an individual building and its site that has been designated as historically or architecturally significant, particularly buildings open to the public, such as state capitols, city halls, courthouses, libraries, hotels, theaters, churches, and house museums. It is certainly possible, but is less common, to prepare a historic structure report for a privately owned residence.

Besides the building itself, a historic structure report may address immediate site or

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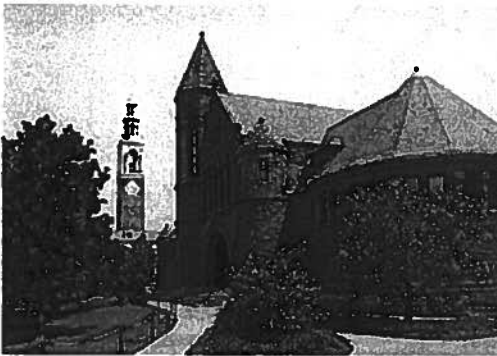
Capitol (above); significant properties that are to be rehabilitated and adaptively reused; and properties that are to be preserved or restored as house museums. Photo: Wiss Janney Elstner Associates, Inc.

landscape features, as well as items that are attached to the building, such as murals, bas reliefs, decorative metalwork, wood paneling, and attached

floor coverings. Non-attached items, including furniture or artwork, may be discussed in the historic structure report, but usually receive in-depth coverage in a separate report or inventory. One significant property may include multiple buildings, for example, a house, barn, and outbuildings; thus, a single historic structure report may be prepared for several related buildings and their site.



The scope of such studies includes the interior as well as exterior of the historic structure. This is the interior of the Stanley Field Hall, Field Museum, Chicago. Photo: McGuire Iglesias & Associates, Inc.



The University of Vermont has more than thirty contributing buildings in four historic districts listed in the National Register of Historic Places. The Campus Master Plan recognizes a commitment to respect and maintain the historic integrity of these facilities. Historic structure reports are available for many of the University's historic structures. Photo: University of Vermont Historic Preservation Program.

Historic structure reports can be prepared for other historic resource types as well, including bridges, canals, ships, mines, and locomotives, which are categorized as structures by the National Register of Historic Places; sculpture and monuments, which are categorized as objects; and college campuses and industrial complexes, which are categorized as districts. For battlefields, gardens, designed landscapes, and cemeteries, which are categorized as sites, parallel evaluation and investigation is usually undertaken through a separate document called a cultural landscape report.

A team approach. With such an array of subject matter, it is not surprising that preparation of a historic structure report is almost always a multidisciplinary task. For a small or simple project, the project team may include only one or two specialists. For a

complex project, a team may involve historians, architectural historians, archeologists, architects, structural engineers, mechanical engineers, electrical engineers, landscape architects, conservators, curators, materials scientists, building code consultants, photographers, and other specialists.

The disciplines involved in a specific historic structure report reflect the key areas or issues to be addressed for the particular property. The project leader or designated principal author for the report is responsible for coordinating and integrating the information generated by the various disciplines. Designation of a principal author may depend on the goals of the historic structure report and on which disciplines are emphasized in the study.



For small or simple projects, the project team may include only one or two specialists while complex projects may involve a large number of investigators and specialists. Evaluation of this barn may primarily involve an historian, an architectural

Value of the Historic Structure Report

conservator, and a structural
engineer. Photo: Wiss Janney Elstner
Associates, Inc.

The completed historic structure report is of value in many ways. It provides:

- A primary planning document for decision-making about preservation, rehabilitation, restoration, or reconstruction treatments
- Documentation to help establish significant dates or periods of construction
- A guide for budget and schedule planning for work on the historic structure
- A basis for design of recommended work
- A compilation of key information on the history, significance, and existing condition of the historic structure
- A summary of information known and conditions observed at the time of the survey
- A readily accessible reference document for owners, managers, staff, committees, and professionals working on or using the historic structure
- A tool for use in interpretation of the structure based on historical and physical evidence
- A bibliography of archival documentation relevant to the structure
- A resource for further research and investigation
- A record of completed work

Benefits for large-scale and long-term projects. In the development of any historic structure report, the scope of work and level of detail are necessarily adjusted to meet the requirements of a particular project, taking into account the property's significance, condition, intended use, and available funding. This does not mean that every significant historic property requires-or receives-a comprehensive investigation and detailed report. Some historic structure reports are of very limited scope. It may be necessary for a project to proceed without a historic structure report, either because of the cost of the report or a perceived need to expedite the work.

Most large-scale or long-term work projects would benefit greatly from the preparation of such a report-and not only from the value of the report as an efficient planning tool (See box above). If work proceeds without a historic structure report to guide it, it is possible that physical evidence important to understanding the history and construction of the structure may be destroyed or that inappropriate changes may be made. The preparation of a report prior to initiation of work preserves such information for future researchers. Even more importantly, prior preparation of a report helps ensure that the history, significance, and condition of the property are thoroughly understood and taken into consideration in the selection of a treatment approach and development of work recommendations. One of the goals of a historic structure report is to reduce the loss of historic fabric or significance and to ensure the preservation of the historic character of the resource.

When to Prepare the Report

Optimal first phase. The historic structure report is an optimal first phase of historic preservation efforts for a significant building or structure, preceding design and implementation of preservation, rehabilitation, restoration, or reconstruction work.

Information contained in the report documents existing conditions and serves as a basis for proposing physical changes. As additional information is learned relevant to the history of the building, and as work on the historic structure is implemented, the report can be amended and supplemented.

Scope of Work

The following questions should be answered to determine the scope of work required for the study:

- Is the building's history well understood?
- Has the period of significance been established?
- Does the building represent a variety of periods of construction, additions, and modifications, not all of which may be significant?
- What archival documentation is available?
- Does the building have physical problems that require repair? What construction materials and systems are known to exhibit distress or deterioration?
- Does the building have code or functional problems that interfere with its use?
- Is the building in use? Is a new or more intensive use planned?
- Is funding available to commission the report needed to address these requirements? If not, can the scope of the report be reduced to answer critical questions in a limited report?
- Has the time frame for the overall project been established?

The length of time required to prepare a historic structure report and the budget established for its development will vary, depending on the complexity of the project, the extent and availability of archival documentation, and to what extent work has already been performed on the building. If the scope of a historic structure report for a simple building is limited to a brief overview of historic significance, a walk-through condition assessment, and general treatment, the study and report may be completed within a few months' time by an experienced investigator. On the other hand, a historic structure report for a larger building with numerous past alterations and substantive problems will require extensive research and on-site study by a multidisciplinary team. This type of report can often take up to two years to complete.



At the Hudson Opera House, a multi-arts center in Hudson, New York, the historic structure report was prepared incrementally. The first phase of the report focused on assessment and recommendations for

Incremental preparation. If budgetary constraints preclude completing the historic structure report as one project, it can be prepared incrementally. The work recommendations should not be developed or implemented prior to completion of research and investigation, except for emergency stabilization to prevent immediate failure or damage, or temporary measures to address critical health and safety issues. A partial historic structure report can be completed in preparation for anticipated work that must be initiated to preserve or protect the building. This type of report includes analysis of only those building elements and systems that may be affected by the proposed work, and involves only the specialists needed to address the types of investigation and work planned. For example, research and documentation of existing interior finishes may be required before undertaking localized

repair of the roofing, the most critical structural stabilization that will require removal of issue in preservation of the building. interior materials.
Photo: Gary Schiro.

In undertaking such work prior to the completion of a historic structure report, caution should be taken not to alter or unnecessarily remove changes to the building that had occurred over time. The completed report may conclude that such changes to the building may have acquired significance in their own right and therefore merit preservation.

Documenting past work. Sometimes a historic structure report is initiated when repair or restoration work on the historic building has already been completed. Although it is always recommended that the study be done prior to new work, in this case, the report needs to document--as fully as possible--the condition and appearance of materials, elements, and spaces as they existed prior to the work performed. The extent to which this can be achieved depends on the quality of archival documentation available and physical recording undertaken prior to the completed work. The report should describe the nature and extent of the past repair or restoration work, and, if possible, should also document research performed, reasons for design decisions made, and the construction process for the work already completed on the structures.

Commissioning the Report

Commissioning a historic structure report requires answering a series of questions to establish the scope of work. The goals of the report need to be defined and the report should be designed to support planning for the future of the historic structure. This effort may involve gathering information to answer questions about what is significant about the building and site; what uses are appropriate for the building, or whether existing uses need to be modified; what known conditions require repair and whether those repairs are urgent; and what short-term and long-term goals need to be addressed. Finally the available budget for the historic structure report project should be established before a request for proposals is issued.

The procedures for preparing a historic structure report and the outline of report content and organization can serve as the basis to develop a scope of work for the study and also to solicit proposals for a report that reflects the requirements of the specific structure, and, of course, the available budget. Although the request for proposals should always establish such a scope of work, firms may be invited to suggest adjustments to the scope of work based on their past experience. The request for proposals should include a qualifications submittal from each proposer. This submittal should include resumes for the principal investigators and a description of experience in preparing historic structure reports or similar studies, as well as experience with buildings of similar type, age, and construction to the subject of the study. References and sample of work may be requested from the proposer as part of this submittal. An interview with one or more candidates is highly recommended, both so that the proposers can present their project approach and qualifications, and so that the client can ask questions in response to the submitted proposal.

How Much Will It Cost?

The cost of undertaking a historic structure report is determined by numerous factors, some of which may be unique to a particular property. Common to most projects, however, are seven factors that help determine the cost of a report:

1. The level of significance of the property will certainly influence the cost. That is, a property that is nationally significant would likely require a greater effort than a property that is only locally significant.

2. The treatment and use for which the historic structure report information provides a basis is an important cost consideration. If the decision is reached to maintain a building in its current form, the level of effort required in preparing a historic structure report would be less than where the intended treatment is a comprehensive restoration. A change in building use likewise may increase the level of effort; for example, the additional work involved in addressing different building code provisions.

3. The availability of information about the historic resource has a direct bearing on costs. Some historic structures are well researched, and drawings may have been prepared to exacting standards, while others may require considerable original research and investigation to establish the evolution of the structure. On occasion, a property owner's in-house staff or volunteers may undertake research in advance of a contracted study as a way to reduce the cost of the report.

4. The location of and access to a historic building is a cost factor for some studies. A property in a remote mountain location can involve high travel costs relative to properties in or near an urban area. A structure requiring special techniques for exterior physical inspection would involve higher access costs than a small residential structure.

☒ Historical photographs are an invaluable aid and time saver in establishing a building's original construction and evolution; in guiding the replication of missing features; and even in understanding existing material deterioration. The availability of information, such as archival photographs, surviving original

Historical photographs are an invaluable aid and time saver in establishing a building's original construction and evolution; in guiding the replication of missing features; and even in understanding existing material deterioration. The availability of information, such as archival photographs, surviving original architectural drawings, or HABS documentation, has a direct bearing on the cost of preparing a historic structure report. In this circa 1890 photo of the Rancho San Andrés Castro Adobe, the "lumbering up" on the south end is a character-defining feature of adobe construction that is rarely seen today. Photo: Historic photograph from the Historic Structure Report for Rancho San Andrés Adobe by Edna Kimbro, State Historian, California State Parks, Monterey District.

Collecting Information for the Report

A typical study involves:

- Preliminary walk through
- Research and review of archival documentation
- Oral histories
- An existing condition survey (including exterior and interior architectural elements, structural systems, mechanical and electrical systems, etc.)
- Measured drawings following the *Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation*
- Record photography
- Evaluation of significance
- Discussion with the owner and users about current and future intended uses for the structure

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- Selection and rationale for the most appropriate approach to treatment (preservation, rehabilitation, restoration, or reconstruction)
- Development of specific work recommendations

5. The size and architectural character of a property affects the time required to prepare a historic structure report. A simple four-room vernacular structure would usually involve less effort than a complicated high-style courthouse with many significant spaces.



Numerous factors influence the cost of preparing a historic structure report including the level of significance, size, and complexity of the property; required treatment and use; existing condition; and the location and access to the structure. Historic structure reports were prepared for several small lighthouses along the Oregon coast, including the Coquille River Lighthouse, shown here. Photo: Wiss, Janney Elstner Associates, Inc.

6. The physical condition of the structure and also the extent of physical fabric that is accessible for study will be cost determinants as well. Obviously, a property in good condition is usually less problematic than one in a deteriorated state. For a structure that was continuously occupied and where alterations cover earlier fabric, the opportunity to extract information from physical fabric dating to early periods may be limited without extensive removals that are usually beyond the scope of the historic structure report study. Even where buildings are vacant, there are instances where certain physical investigations may need to be limited because of the destructive impact that will occur to historic fabric.

7. The type of final report that is required can significantly affect the cost of the project, but is an area where costs can readily be controlled. Historic structure reports do not necessarily need to be professionally bound and printed. In-house desktop publishing has become commonplace, and a formal work product can often be obtained without excessive costs. Overly sophisticated printing and binding efforts represent a misplaced funding allocation for most historic properties. There are distinct advantages to having a report prepared in an appropriate electronic form, thus

reducing the number of hard copies and facilitating future updates and additions to the report. For most properties where historic structure reports are prepared, ten or so hard copies should suffice. Providing one copy of the report in a three-ring binder is a helpful and inexpensive way to furnish the owner with a "working" copy of the document.

Suggested steps for collecting information prior to configuring the data into the actual report are as follows:

Preliminary walk through. A preliminary walk through of the building and its site with the owner or site manager, appropriate building staff representatives, and key members of the historic structure report team is important to review the project scope of work. During the walk through, a brief review of existing conditions can be performed to highlight user concerns and gather information about distress and deterioration observed. Building staff may also be able to provide information on recent repairs, current maintenance procedures, and specific areas of active deterioration. A brief review of existing documentation available on site is also useful. Site personnel may be able to recommend additional archival resources.

Historical research. Archival research should be directed toward gathering information on the building's history, original

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construction and later modifications, occupancies, and uses over time. Research for the report is not intended to produce a large compendium of historical and genealogical material, but rather selected information necessary to understand the evolution of the structure, its significance, and justification for the treatment selected. For significant sites where other types of studies such as archeological investigations or a cultural landscape report have been completed or are underway, coordination is required to ensure that research information is shared and that the research effort is not duplicated.

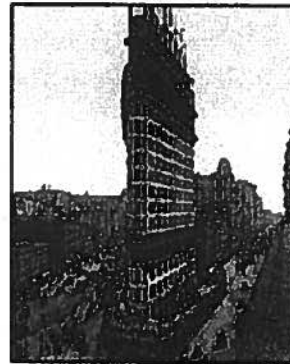
If a National Register nomination or other inventory has already been completed for the building and its site, the bibliography of that document may suggest possible sources for further research. In addition, a completed National Register nomination can serve as a starting point for development of the historic structure report sections on history and significance, and can be included in the appendix of the report.

Public and university libraries, and state and local historical societies are likely sources of relevant materials. Municipal records collections often contain deed and building permit information that is useful in developing a chronology of ownership and construction. Architectural, engineering, and construction documents, shop drawings, repair documents, and maintenance records are valuable sources of information. The original drawings and specifications, if extant, may be kept at the archives of the historic building but may also have been retained by the firm that designed the building or successor firms. Building records and other archival documentation may have remained with the structure or site, with previous owners, or with related properties.

Historic photographs are invaluable in developing a chronology of building changes and in determining the character and detailing of missing elements. Photographs in private collections, not intended as formal documentation, can often be useful. For example, family photographs taken outdoors can document a building that appears in the background. Renderings and paintings can also be useful, but these images must be carefully analyzed and compared with other information to ensure accurate interpretation. Correspondence and oral histories can be important additions to the overall information, but may be unreliable and should be confirmed, when possible, by comparison with photographic documentation and physical evidence.

Fire insurance maps, such as Sanborn maps, can provide information on type of construction materials. When maps from different years are available, these can be useful in developing a chronology of additions and other changes to the structure.

Existing condition survey. A survey is performed to document physical spaces and elements, and to assess the current condition of building materials and systems. In conjunction with historical research, the condition survey helps determine the historic integrity of a structure. The survey and inspection should address the building's exterior and interior materials, features and



Historical research is directed toward gathering information on a structure's history, original construction and later modifications, occupancies, and uses over time. Research may range from national repositories such as the Library of Congress to local collections or private family records. Old newspapers, architectural journals and even manufacturing trade catalogs can be surprising sources of historical accounts and illustrations. This circa 1902 photograph of New York's Flatiron Building is of the construction in progress; such photographs are useful in understanding building chronology as well as concealed conditions of as-built construction such as building framing. Photo: Library of Congress, LC-D401-14278.

finishes; structural systems; interior spaces; mechanical, electrical, and plumbing systems; and fire detection and security systems. Further study may be required such as non-intrusive or intrusive investigation, field testing, sample removal, and laboratory testing and analysis of materials.

Archeological investigations can provide information on the locations of building foundations and other sub-grade building elements, and can assist in developing information on the function of adjacent site areas, building elements, and previously unfinished floor spaces. The survey may also address the immediate site landscape, if this is not covered in a separate cultural landscape report.

Information gathered during the survey can be documented with field notes on baseline drawings consisting of field sketches or measured drawings. In addition, documentation can include photographs (35-mm, large format, digital, perspective-corrected, and scale-rectified photographs; photogrammetry; and laser techniques), sketches and measured drawings, computer-aided design and drafting (CADD), video records, and written notes and field measurements. Depending upon project requirements, documentation may need to be prepared to archival standards regarding paper, photographs and negatives, electronic records, and backup data.



Archeological studies may be valuable in uncovering important evidence of changes to a historic structure. Following historical research and after several archeological soil probes, a decision was made to excavate an area in front of a mid-nineteenth century fireplace, revealing the original dirt floor and hearth undetected by earlier restoration efforts. Photo: NPS files.

Measured drawings and record photography. The collection of the Historic American Building Survey/Historic American Engineering Record (HABS/HAER) archive at the Library of Congress should be searched in case the property has been previously documented through drawings and photographs. While many historic properties have been documented since the start of this invaluable collection in the 1930s, it is still more likely that this type of documentation does not exist for a property for which a historic structure report is being undertaken. Preparation of such documentation to portray the current condition of a property can be an invaluable addition to the historic structure report. Besides serving as a documentary record of a structure, the recording documents can serve another purpose such as an easement document, information for catastrophic loss protection, interpretive drawings, or baseline drawings for proposed work. If undertaken as part of the current building study, the measured drawings and record photography should follow the *Secretary of the Interior's Standards and Guidelines for Architectural and Engineering Documentation*.

Materials Investigation and Testing. Field examination and testing of building material may include non-destructive (non-intrusive) or, where necessary, destructive (intrusive) examination and/or testing of materials, components, and systems. Examples of non-destructive methods of field examination and testing include field microscopy, the use of a metal detector to locate concealed metal elements, and X-ray techniques to assess concealed conditions. Some examples of

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The use of special access methods may be necessary for close-up investigation of building elements. At the Wisconsin State Capitol, project architects and engineers used rappelling techniques. Photo: Wiss, Janney, Elstner Associates, Inc.

destructive methods of field examination and testing include structural testing, strain relief testing, and inspection openings (probes).

Instruments such as a borescope, through which concealed conditions can be viewed through a small hole, permit enhanced examination while limiting damage to the existing building fabric.

Depending upon existing conditions and the results of the site inspection, field monitoring may be required. Field monitoring can include humidity and temperature monitoring, documentation of structural movement and vibrations, light level monitoring, and other environmental monitoring.

In addition, materials samples may be removed for laboratory studies. A wide range of laboratory testing may be appropriate to establish the composition of various construction materials, determine causes of deterioration, and identify and assess appropriate conservation and repair measures. Materials analysis may also be helpful in dating changes to the structure and in developing a chronology of construction. For example, mortar analysis may be performed to determine the composition of original and repointing mortars and to provide information for use in designing a mortar mix for repointing. As another example, paint and other coatings may be analyzed to determine finish types and composition, and original and subsequent color schemes, using special analysis techniques and comparison with color standard systems. Samples should generally be returned to the owner and retained in case future testing is required. In some cases, it may be appropriate to reinstall the samples after materials studies have been completed.

Sample removal and analysis may also be required to identify hazardous materials, which are present in many historic buildings. For example, lead and other heavy metals are components of many older paints and coatings, and asbestos is a constituent of some roofing materials, claddings, sealants, and insulation. Mold and mildew may be present and require special treatment; in this case a consulting industrial hygienist may need to be included in the project team. Analysis may be performed to confirm the materials present, determine the nature of the hazard, and help identify methods of remediation or management.

As buildings constructed during recent decades become "historic," newer materials require study and analysis as part of historic structure reports. For example, curtain wall components and joint sealants may require analysis to determine their composition, identify causes of deterioration, and select appropriate replacement sealants. Composite materials and plastics, present in post-World War II buildings, may also require special effort to determine repair techniques or appropriate materials for replacement.



Paint studies may not only help establish the chronology of paints and paint colors used on a building but also may aid in the dating of existing architectural features. Examination of the paint layers on these modillions utilizing a hand-held microscope enabled an investigating team to confirm in the field which modillions were original and which were later replacements. Photo: NPS files.

All of the information gathered during the physical investigation, and through field testing and laboratory analysis, should be documented in field notes, sketches, photographs, and test reports. This information is incorporated in the historic structure report and provides a basis for the development of treatment recommendations.

Evaluation of significance. The process of evaluation occurs throughout the study of the historic structure as information is gathered, compared, and reviewed. Historical data and physical evidence are reviewed to help evaluate the historical, architectural, engineering, and cultural significance of the property, its construction and use, and occupants or other persons associated with its history and development. This evaluation includes determination of the period(s) of primary significance. An overview of the building's history and an assessment of its significance are included in the report.

The Secretary of the Interior provides four distinct but interrelated approaches to the treatment of historic properties:

- **Preservation** focuses on the maintenance and repair of existing historic materials and retention of a property's form as it has evolved over time.
- **Rehabilitation** acknowledges the need to alter or add to a historic property to meet continuing or changing uses while retaining the property's historic character.
- **Restoration** is undertaken to depict a property at a particular period of time in its history, while removing evidence of other periods.
- **Reconstruction** re-creates vanished or non-surviving portions of a property for interpretive purposes.

Depending on the historical significance of the property, and whether a detailed history has already been written, a brief or more detailed history may be appropriate. A chronology of construction and changes to the building, developed through historic and physical research, is an effective approach to identifying original building elements, as well as modifications that have occurred over time. If a comprehensive National Register nomination or other inventory has been prepared, the significance may already be defined. In other cases, the significance of a building and even its treatment may have been established through authorizing legislation or through the charter of an organization or foundation that owns the historic property. Where appropriate, however, the building's significance should be re-evaluated in light of research performed for the historic structure report.

The results of the research, investigation, and field and laboratory testing are reviewed as a basis for developing specific work recommendations. The history and significance of the building and its site are evaluated to understand what spaces, elements, and finishes are of architectural or historical importance, and to confirm the overall project goals and treatment direction. The physical condition of the building and its systems is evaluated with regard to existing deterioration and distress, and needed repairs, as well as changes required to meet treatment goals. Attention is given to identification of life safety issues and code considerations. Conditions are also identified that could lead to future safety risks, loss of historic fabric, or loss of performance.

Selection of a treatment approach. Once the building's history, significance, and physical condition have been researched and investigated, an appropriate treatment is usually selected. Depending upon the intended use of a

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property, funding prospects, and the findings of the investigation, it may be necessary in some cases to identify and discuss an alternate treatment as well. For example, a building currently occupied by caretakers that is a candidate for restoration and use as a museum may require such ambitious funding support that, for the foreseeable future, a more practical treatment could be to preserve the building and retain the caretakers. In this case, the treatment recommendation would be to restore the property and project work relevant to the restoration would be described. However, the alternate treatment (in this instance an interim one) of preserving the building in its current form would also be described, including discussion of work appropriate to preservation such as repairing the existing roof and installing a monitored fire detection system.

In selecting an appropriate treatment, *The Secretary of the Interior's Standards for the Treatment of Historic Properties* can be particularly helpful. In use for more than twenty-five years, the Standards are a widely accepted means of planning for and undertaking project work in a manner that preserves historic materials and elements. The Secretary's Standards have been adopted by many state and local review entities for review of work proposals on historic structures.

The Standards and their accompanying Guidelines describe four different options for treatment and list recommended techniques for exterior and interior work consistent with each option. One treatment (preservation, rehabilitation, restoration, or reconstruction) is usually selected and followed throughout the course of a project involving a particular building. Application of a single treatment approach helps to avoid inappropriate combinations of work, such as restoring a building's appearance to an earlier time in history while simultaneously constructing a new addition.

Development of work recommendations. The work recommendations are a central feature of the report. They are developed only after the research and investigation has been completed and the overall project goal established as to whether a particular building should be preserved, rehabilitated, restored, or reconstructed. The specific work recommendations need to be consistent with the selected treatment. If analysis performed during the study suggests that the approach or use initially proposed would adversely affect the materials, character, and significance of the historic building, then an alternate approach with a different scope of work or different use may need to be developed. The process of developing work recommendations also needs to take into account applicable laws, regulations, codes, and functional requirements with specific attention to life safety, fire protection, energy conservation, abatement of hazardous materials, and accessibility for persons with disabilities.

In addition to project goals, the proposed work is also guided by the building's condition. The scope of recommended work may range from minor repairs to structural stabilization to extensive restoration. In addition, the scope of work may be very narrow (e.g., priming and painting of woodwork and repair of deteriorated roof flashings), or very extensive (e.g., stabilization of timber framing or major repair and repointing of



The treatment approach selected for a building usually is determined by the intended use of a property, funding prospects, and the findings of an investigation. The Wolf Creek Inn, operated by the Oregon Parks and Recreation Department, is among the most intact and oldest active traveler's inns in Oregon. The historic structure report outlined a rehabilitation treatment which included such work recommendations as repairs to specific historic fabric, landscape restoration and site improvements, and upgrading of the building's mechanical and electrical systems. Photo: Historic American Building Survey, 1934.

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exterior masonry walls). The result of implementing (or not implementing) the recommended work needs to be considered as the recommendations are developed.



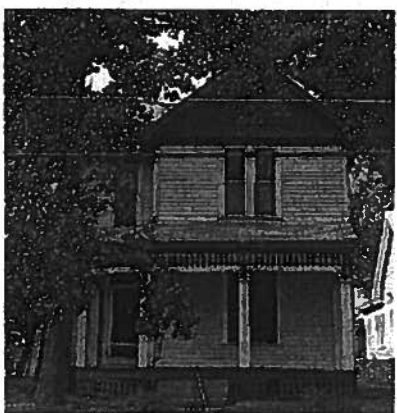
The historic structure report for the Hotel Florence, shown here in 1886, provided a basis for stabilization and repair work which has been completed. Initial phases of work addressed preservation of the building envelope, structural repairs, and limited mechanical and electrical improvements. The report also provided recommendations for future rehabilitation work that will be implemented in phases as funding becomes available. Photo: Historic American Buildings Survey.

Of course, the available project budget is also a factor in determining the extent of recommended work and whether it must be accomplished in several phases or projects. Whether or not available budget is the primary factor in determining the extent of work that can be performed, it is often useful to prioritize recommended work items. The recommended tasks can be examined in terms of relative importance and the time required for implementation. Prioritizing repairs can be critical where immediate or short-term work is needed to stabilize a building or structure, eliminate safety hazards, make the building weather tight, and protect it against further deterioration.

Appropriate procedures for undertaking the recommended work items are described in the historic structure report and are intended to serve as a basis for planning the repair,

rehabilitation, or restoration design. The level of detail to which the work items are defined should be limited in the historic structure report, as these recommendations serve as the foundation for, rather than in place of, design and construction documents for the work. For example, baseline drawings annotated with existing condition notes can later serve as a starting place for development of construction drawings. Outline procedures provided in the report for recommended work items can be used later to develop specifications for the work. Finally, a general opinion of probable costs associated with the recommended work is often prepared. A cost estimate is useful to building owners and managers in budget planning and also assists in prioritizing the work. For large or complex projects, the services of a professional cost estimator may be helpful in this effort.

Report Preparation



The historic structure report for the

Upon completion of the research, physical investigation, evaluation, and work recommendations, the historic structure report is compiled. The principal investigator may submit an outline of the report for owner review at the beginning of the report preparation. A draft report may also be submitted for review when the report is partially complete, especially if there are many new research findings, significant physical distress conditions to be addressed, or complicated choices to be made in determining the treatment.

The report should be prepared in a style and format that is readily

considered but should not take precedence over clarity and thoroughness of documentation.

[illegible]

Meetings and presentations. In addition to meetings with site personnel early in the study process, it is helpful for the project team to meet at key points during the research, investigation, and development of the historic structure report. For example, it is useful for the project team members performing archival research to meet with site personnel to review documents and findings, and to help ensure that important archival sources have not been overlooked. Project team members may also walk through the building with site personnel during the investigation phase to review and discuss existing conditions and possible recommendation approaches. When the report is in draft form, a meeting of the project team with those personnel who will be reviewing and using the report is useful to discuss overall goals, treatments, and recommendations as these are being developed. Finally, when the study is complete, a presentation of the completed study by the project team helps to familiarize the owner and building personnel with the report, highlight key issues, answer questions, and provide a transition to the use of the report as a working document by the building's caretakers.

The scope of the study-historical research, condition survey, investigation and testing, evaluation, selection of appropriate treatment, and development of specific work recommendations-generates a wealth of information about the history and condition of the building and the specific work needed to, preserve, rehabilitate, restore, or reconstruct it. This information is typically a combination of historical and technical data obtained by different members of the project team and presented as an integrated report in text, photographs, drawings, and tables. The project leader or principal author must guide the development of the report so that key issues are addressed, information is documented and assimilated in the report findings and discussion, recommendations are clearly presented, and no information is lost or misinterpreted in the compilation process.

In order to integrate the many pieces of information into a coherent and comprehensive whole, the historic structure report is generally organized into two principal sections preceded by a brief introduction that summarizes overall findings and recommendations and provides project administrative data. The main sections of the report consist of (1) a narrative that documents the evolution of the building, its physical description, existing condition, and an evaluation of significance; and (2) a discussion of historic preservation

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objectives, together with recommendations for an overall treatment approach and for specific work. The report is usually supplemented with footnotes or endnotes, bibliography, and appendices of historical documentation and technical data.

It is highly recommended that a post project record of all work performed later be added as a supplement to the historic structure report. This record may consist of annotated drawings, photographs, and other documentation of the work performed. Site personnel may help coordinate this supplement or record if the principal author of the report is not involved in the later construction phase. Some organizations and government agencies consider the post project record to be a third part of a historic structure report and not just a supplement.

When physical evidence is discovered during the course of the construction work or when new documentary evidence is discovered as research continues after completion of the report, this also should be recorded and incorporated into the historic structure report or in an appendix to the report. An important goal of the historic structure report process is to maintain the report as an active and working document, both to facilitate the use of information compiled in the report and to permit the report to readily accommodate new information as it becomes available.

Report Production and Availability

The historic structure report is most often prepared in the form of a printed, illustrated manuscript. In recent years, attention has been given to creating or transforming the historic structure report into an electronic document as well. In electronic format, the report can easily be shared with interested parties and is readily updated.

However, because historic structure reports are still mostly produced in printed format (although sometimes concurrently with an electronic document), it is important that, after production, one or more copies be provided to the property owner and also made available to the project team. As the basis for design and construction documents, the historic structure report needs to be readily available and extensively used during implementation of the work.

At least one site copy should be maintained in a physical format that can be readily updated, such as a three-ring notebook to which additional documentation can easily be added. Field documentation materials, including photographs and negatives, measured field drawings, condition reports and surveys, materials test reports, and other information gathered during the study can be stored in an archive by the building owner for future reference.

An archival copy should also be provided to the owner, and a minimum of one archival copy kept at the project site and at an appropriate local or regional archive, such as a state historical library. Copies of the historic structure report may also be provided to a local historical organization or university and the state historic preservation agency or historical society. In addition, a copy may be given to the National Trust for Historic Preservation Library at the University of Maryland at College Park, which has established a reference collection of historic structure reports.

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Summary

Various agencies and organizations have employed historic structure reports as planning tools for many years, for example, the National Park Service, General Services Administration, New York State Office of Parks, Recreation and Historic Preservation, and the Society for the Preservation of New England Antiquities. These and other agencies and organizations may have specific requirements and procedures for reports prepared for properties under their stewardship that differ from those described in this Preservation Brief. All historic structure reports, however, share a common goal—the careful documentation and appropriate treatment of significant historic structures.

The historic structure report is an optimal first phase of historic preservation efforts for a significant building, preceding design and implementation of its preservation, rehabilitation, restoration, or reconstruction. If work proceeds without a historic structure report as a guide, physical evidence important to understanding the history and construction of the building may be destroyed. The preparation of a report prior to initiation of work provides documentation for future researchers. Even more importantly, prior preparation of a report helps ensure that the history, significance, and condition of the property are thoroughly understood and taken into consideration in the selection of an appropriate treatment and in the development of work recommendations. A well prepared historic structure report is an invaluable preservation guide.

Content and Organization of Report

- Cover Page
- Table of Contents
- Introduction
 - Study Summary
 - Project Data

Part 1 - Developmental History

- Historical Background and Context
- Chronology of Development and Use
- Physical Description
- Evaluation of Significance
- Condition Assessment

Part 2 - Treatment and Work Recommendations

- Historic Preservation Objectives
- Requirements for Work
- Work Recommendations and Alternatives
- Bibliography
- Appendices
- Supplemental Record of Work Performed (section often added later)
 - Completion Report
 - Technical Data (on work completed)

Introduction. This section includes a concise account of research and investigation findings and recommendations for treatment and use, and a record of project administrative data.

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- *Study Summary* - a brief statement of the purpose, findings, and recommendations of the study, including major research findings, key issues addressed by the study, and a summary of recommendations for treatment and use.
- *Project Data* - a summary of project administrative data (e.g., location, ownership, and landmark status of property) and the methodology and project participants.

Part 1 Developmental History. This section consists of a narrative report based on historical research and physical examination documenting the evolution of the building, its current condition and causes of deterioration, and its significance.

- *Historical Background and Context* - a brief history of the building and its context, its designers and builders, and persons associated with its history and development.
- *Chronology of Development and Use* - a description of original construction, modifications, and uses, based on historical documentation and physical evidence.
- *Physical Description* - a description of elements, materials, and spaces of the building, including significant and non-significant features of the building.
- *Evaluation of Significance* - a discussion of significant features, original and non-original materials and elements, and identification of the period(s) of significance (if appropriate).
- *Condition Assessment* - a description of the condition of building materials, elements, and systems and causes of deterioration, and discussion of materials testing and analysis (if performed as part of this study).

Part 2 Treatment and Work Recommendations. This section presents the historic preservation objective and selected treatment (preservation, rehabilitation, restoration, or reconstruction), requirements for work, and recommended work that corresponds with the defined treatment goal.

- *Historic Preservation Objectives* - a description and rationale for the recommended treatment and how it meets the project goals for use of the building, e.g., rehabilitation for a new use, restoration for interpretive purposes, etc.
- *Requirements for Work* - an outline of the laws, regulations, and functional requirements that are applicable to the recommended work areas (e.g., life safety, fire protection, energy, conservation, hazardous materials abatement, and handicapped accessibility).
- *Work Recommendations and Alternatives* - a presentation of tasks recommended to realize the proposed treatment approach; evaluation of proposed solutions; and description of specific recommendations for work, including alternate solutions, if appropriate.

Notes, Bibliography and Appendices

- Footnotes or endnotes
- Bibliography, annotated if possible
- List of sources of information (e.g., archives, photograph collections)
- Appendices (e.g., figures, tables, drawings, historic and current photographs,

- reference documents, materials analysis reports, etc.)
- Index (if the report is particularly long or complex)

Supplemental Record of Work Performed. This section documents work performed, which may include planning studies, technical studies such as laboratory studies or structural analysis, or other investigation work that was not part of the scope of the original historic structure report, and records physical work on the building (construction documents, annotated drawings, photographs). The section is usually added later to update the report, as most historic structure reports are issued prior to implementation of the recommended treatment approach and specific work. It is sometimes referred to as Part 3 of the report.

- *Completion Report* - a record of the work accomplished, physical evidence discovered during construction, and how findings affect interpretation of the building.
- *Technical Data* - a collection of field reports, material data sheets, field notes, correspondence, and construction documents.

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Preservation Services, 1995.

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Front cover image: Wisconsin State Capitol. Photo: Wiss, Janney, Elstner Associates, Inc.

This publication has been prepared pursuant to the National Historic Preservation Act, as amended, which directs the Secretary of the Interior to develop and make available information concerning historic properties. Comments about this publication should be directed to: Charles Fisher, Technical Publications Program Manager, Technical Preservation Services, National Park Service (Org. 2255), 1849 C Street, NW, Washington, DC 20240. This publication is not copyrighted and can be reproduced without penalty. Normal procedures for credit to the author and the National Park Service are appreciated. Unless otherwise indicated, photographs are from NPS files. Excepting NPS photos, the photographs used in this publication may not be used to illustrate other publications without permission of the owners.

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KDW



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

14685 Avion Parkway
Chantilly, VA 20151
(703) 383-VDOT (8368)

November 12, 2009

DAVID S. EKERN, P.E.
COMMISSIONER

Ms. Judi Birkitt **MSC#62**
County of Loudoun
Department of Planning
1 Harrison Street, S.E.
Leesburg, Virginia 20177-7000

Re: ZMAP 2008-0021 Kincora Village Center
Loudoun County

Dear Ms. Birkitt:

I have reviewed the above plan as requested in your submittal dated October 19, 2009, and received on October 23, 2009. The applicant needs to keep in mind the zoning submittal comments are separate from any Chapter 527 traffic study comments. The following comments are offered with the numbers remaining the same as the previous submittals:

1. *The historic structure at Broad Run will preclude the alignment for Pacific Boulevard shown in this proposal. An alignment west of the Toll House and Bridge Ruins should be provided. Information on Structure 53-110 from the Loudoun Dulles North Plan was sent with the previous submittal. The Pacific Boulevard connection to Russell Branch Parkway will have to go to the west of the pond across Broad Run to properly align the two roads. If the applicant intends to attempt to relocate the historic structure, language to that effect needs to be included in the proffers and plans. The plans submitted do not show the corridor discussed at our last meeting for the possible alignment of Pacific Boulevard on the north side of the site.*
3. *The entrance spacing shown on the proposal does not meet the requirements which will be in place at the time the site plans are submitted. Crossovers should be appropriately spaced to meet VDOT requirements and to provide adequate length for the queued vehicles entering each entrance. Please correct the spacing between Road 1 and Road 2.*
4. *The turn lane lengths shown on the sketch appear inadequate. Proper turn lane lengths will be required on the site and construction plans.*
6. *The issue of noise from the proposed ball park should be addressed to avoid complaints in the future if residential uses are permitted on the site. Any proposed sound walls along Rt. 28 will need to meet the FHWA study and design requirements.*

ATTACHMENT 4c

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11. *A map or plan showing the phasing of the transportation improvements listing each phase and proposed improvements should be provided.*
13. Please be advised In Proffer V.B., the proposal regarding a landscaped median, no trees will be permitted within an 8' median since they would not meet the clear zone requirements for Pacific Boulevard.
16. *Right and left turn lanes will be required on Pacific Boulevard for all entrances in the southern portion of the site.*
17. The typical sections for Pacific Boulevard should indicate 25' pavement widths between the edges of the pavement, not from face to face of the curbs.
18. The use of fireworks on the sports portion of the site should be addressed since it could impact traffic on Rt. 28 and the heron rookery.
19. Proffer II.M. on Page 18 should identify the fifty feet with "in height" as part of the description.
20. Proffer III.B. should remove the references to VDOT.
21. Proffer III.B. does not address alternative alignments for Pacific Boulevard on the north end of the site.
22. Proffer III.B. does not address the construction of Gloucester Parkway if no CDA is formed.
23. Proffer III.C.1. does not provide any assurances the County will obtain the right of way to extend Pacific Boulevard. VDOT can not support the application unless the County commits to obtaining the right of way for Pacific Boulevard north of the site if the applicant can not obtain it after a diligent attempt.
24. Proffer III.C.2. needs to address the options for the extension to the north.
25. The end of Proffer III.C.2. permits the applicant to complete construction of the site even if the right of way and construction of Pacific Boulevard or Gloucester Parkway are not constructed. This wording is not acceptable and could leave the site with a single point of access if the County does not diligently pursue the extension of these roads. This proffer needs to limit the site construction until the extensions of these roads is under way and making significant progress.

26. The descriptions in Proffer III.D. need to reference centerline stations on the proposed streets, not generalized points which can be moved significantly.
27. Proffer III.D.5.a. needs to require the applicant to obtain the right of way and construct Pacific Boulevard. Again, the illustrations do not provide for other alignment options.
28. Proffers III.E.1., 2. & 3. need to remove the references to VDOT. The County is responsible for eminent domain on development projects.
29. Proffer III.E.1. needs to provide assurances the County will obtain any rights of way the applicant can not reasonably obtain.
30. Proffer III.E.3. needs to be more clearly written. We do not agree with an open ended development without some progress on the extensions of Pacific Boulevard and Gloucester Parkway.
31. Proffer III.H. needs to state the FHWA requirements for noise attenuation studies will be followed.

If you have any questions, please call me at (703)383-2424.

Sincerely,

Kevin Nelson
Transportation Engineer

cc: Mr. Imad Salous
zmap2008-021zm3KincoraVillCtr11-12-09JB



COMMONWEALTH of VIRGINIA

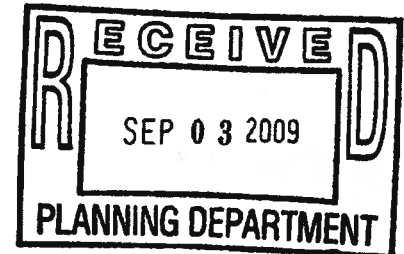
DEPARTMENT OF TRANSPORTATION

14685 Avion Parkway
Chantilly, VA 20151
(703) 383-VDOT (8368)

August 28, 2009

DAVID S. EKERN, P.E.
COMMISSIONER

Ms. Judi Birkitt **MSC#62**
County of Loudoun
Department of Planning
1 Harrison Street, S.E.
Leesburg, Virginia 20177-7000



Re: ZMAP 2008-0021 Kincora Village Center
Loudoun County

Dear Ms. Birkitt:

I have reviewed the above plan as requested in your submittal dated July 27, 2009, and received on July 31, 2009. None of my March 11, 2009 comments were addressed in the response letter. The applicant needs to keep in mind the zoning submittal comments are separate from any Chapter 527 traffic study comments. The following comments are offered:

1. The historic structure at Broad Run will preclude the alignment for Pacific Boulevard shown in this proposal. An alignment west of the Toll House and Bridge Ruins should be provided. Information on Structure 53-110 from the Loudoun Dulles North Plan was sent with the previous submittal. The Pacific Boulevard connection to Russell Branch Parkway will have to go to the west of the pond across Broad Run to properly align the two roads.
2. In locations where there are entrances on both sides of Pacific Boulevard, they should be aligned to permit future signals where warranted.
3. The entrance spacing shown on the proposal does not meet the requirements which will be in place at the time the site plans are submitted. Crossovers should be appropriately spaced to meet VDOT requirements and to provide adequate length for the queued vehicles entering each entrance. Please correct the spacing between Road 1 and Road 2.
4. The turn lane lengths shown on the sketch appear inadequate. Proper turn lane lengths will be required on the site and construction plans.
5. The four lane divided section of Pacific Boulevard south of Gloucester Parkway should be carried further south to provide a proper median for the future left turn to the southeastern portion of the site.

6. The issue of noise from the proposed ball park should be addressed to avoid complaints in the future if residential uses are permitted on the site.
7. One item in Item 1 of the Factors for Consideration previously provided is a bit overstated. While people generally want to live close to their work, they generally do not live next door to their workplace for a number of reasons. Some of these are frequent job changes, relocation of workplaces from one leased place to another and a desire for living quarters other than the type provided in a mixed use type of development. I have seen no concrete data provided to back up the assumption a significant number of people employed in a development of this type will ever live in the same development where they work. There is residential property to the north, east and west of the site which offers more types of products than this type of development can offer. It is highly likely anyone working at this site who wants to live close to work will probably live nearby, but not in the development due to a lack of residential offerings.
8. How will the residential component be addressed in the Rt. 28 Tax District? This District was established as a business tax district with little or no residential property in the District.
9. The affordable housing will most likely be occupied by public sector workers and lower income labor workers, not workers in the proposed office component. The only potential service type workers living on site could possibly work in small shops within the development, but this number is likely to be limited since this type of work is generally of a shorter term with high turnover rates.
10. Affordable housing requirements do not seem to result in the use of available housing in the market. In fact, Fairfax County has one proposal to reduce the amount of affordable housing due to a lack of market interest.
11. A map or plan showing the phasing of the transportation improvements listing each phase and proposed improvements should be provided.
12. The wording in Proffer III.G. should be written more clearly in item (ii) regarding what is entailed in construction costs.
13. In Proffer V.B., the proposal regarding a landscaped median should not permit intersection sight lines to be obstructed on private or public streets. This creates serious liability issues for the County if they permit this on the private streets.
14. The design exceptions mentioned on page 2 of Exhibit B could create serious liability issues for the County as stated in the previous comment.

ZMAP 2008-0021
Kincora Village Center
August 28, 2009
Page 3

15. Road 13 is too close to the adjacent intersection. An entrance will not be permitted within the turn lane for the Pacific Boulevard/Nokes Boulevard intersection.
16. Right and left turn lanes will be required on Pacific Boulevard for all entrances in the southern portion of the site.

If you have any questions, please call me at (703)383-2424.

Sincerely,



Kevin Nelson
Transportation Engineer

cc: Mr. Imad Salous
zmap2008-021zm2KincoraVillCtr8-28-09JB

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COMMONWEALTH of VIRGINIA

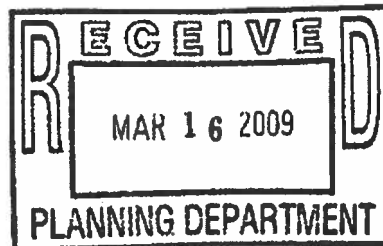
DEPARTMENT OF TRANSPORTATION

DAVID S. EKERN, P.E.
COMMISSIONER

14685 Avion Parkway
Chantilly, VA 20151
(703) 383-VDOT (8368)
March 11, 2009

Ms. Judi Birkitt **MSC#62**
County of Loudoun
Department of Planning
1 Harrison Street, S.E.
Leesburg, Virginia 20177-7000

Re: ZMAP 2008-0021 Kincora Village Center
Loudoun County



Dear Ms. Birkitt:

I have reviewed the above plan as requested in your submittal dated February 13, 2009, and received on February 18, 2009. The following comments are offered:

1. The historic structure at Broad Run will preclude the alignment for Pacific Boulevard shown in this proposal. An alignment west of the Toll House and Bridge Ruins should be provided. Attached is information on Structure 53-110 from the Loudoun Dulles North Plan. The Pacific Boulevard connection to Russell Branch Parkway will have to go to the west of the pond across Broad Run to properly align the two roads.
2. In locations where there are entrances on both sides of Pacific Boulevard, they should be aligned to permit future signals where warranted.
3. The entrance spacing shown on the proposal does not meet the requirements which will be in place at the time the site plans are submitted. Crossovers should be appropriately spaced to meet VDOT requirements and to provide adequate length for the queued vehicles entering each entrance.
4. The turn lane lengths shown on the sketch appear inadequate. Proper turn lane lengths will be required on the site and construction plans.
5. The four lane divided section of Pacific Boulevard south of Gloucester Parkway should be carried further to provide a proper median for the future left turn to the southeastern portion of the site.
6. The issue of noise from the proposed ball park should be addressed to avoid complaints in the future if residential uses are permitted on the site.

7. One item in Item 1 of the Factors for Consideration is a bit overstated. While people generally want to live close to their work, they generally do not live next door to their workplace for a number of reasons. Some of these are frequent job changes, relocation of workplaces from one leased place to another and a desire for living quarters other than the type provided in a mixed use type of development. I have seen no concrete data provided to back up the assumption a significant number of people employed in a development of this type will ever live in the same development where they work. There is residential property to the north, east and west of the site which offers more types of products than this type of development can offer. It is highly likely anyone working at this site who wants to live close to work will probably live nearby, but not in the development due to a lack of residential offerings.
8. How will the residential component be addressed in the Rt. 28 Tax District? This District was established as a business tax district with little or no residential property in the District.
9. The affordable housing will most likely be occupied by public sector workers and lower income labor workers, not workers in the proposed office component. The only potential service type workers living on site could possibly work in small shops within the development, but this number is likely to be limited since this type of work is generally of a shorter term with high turnover rates.
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13. In Proffer V.B., the proposal regarding a landscaped median should not permit intersection sight lines to be obstructed on private or public streets. This creates serious liability issues for the County if they permit this on the private streets.
14. The design exceptions mentioned on page 2 of Exhibit B could create serious liability issues for the County as stated in the previous comment.
15. Any comments regarding the Chapter 527 TIA study review will be provided separately.

ZMAP 2008-0021
Kincora Village Center
March 11, 2009
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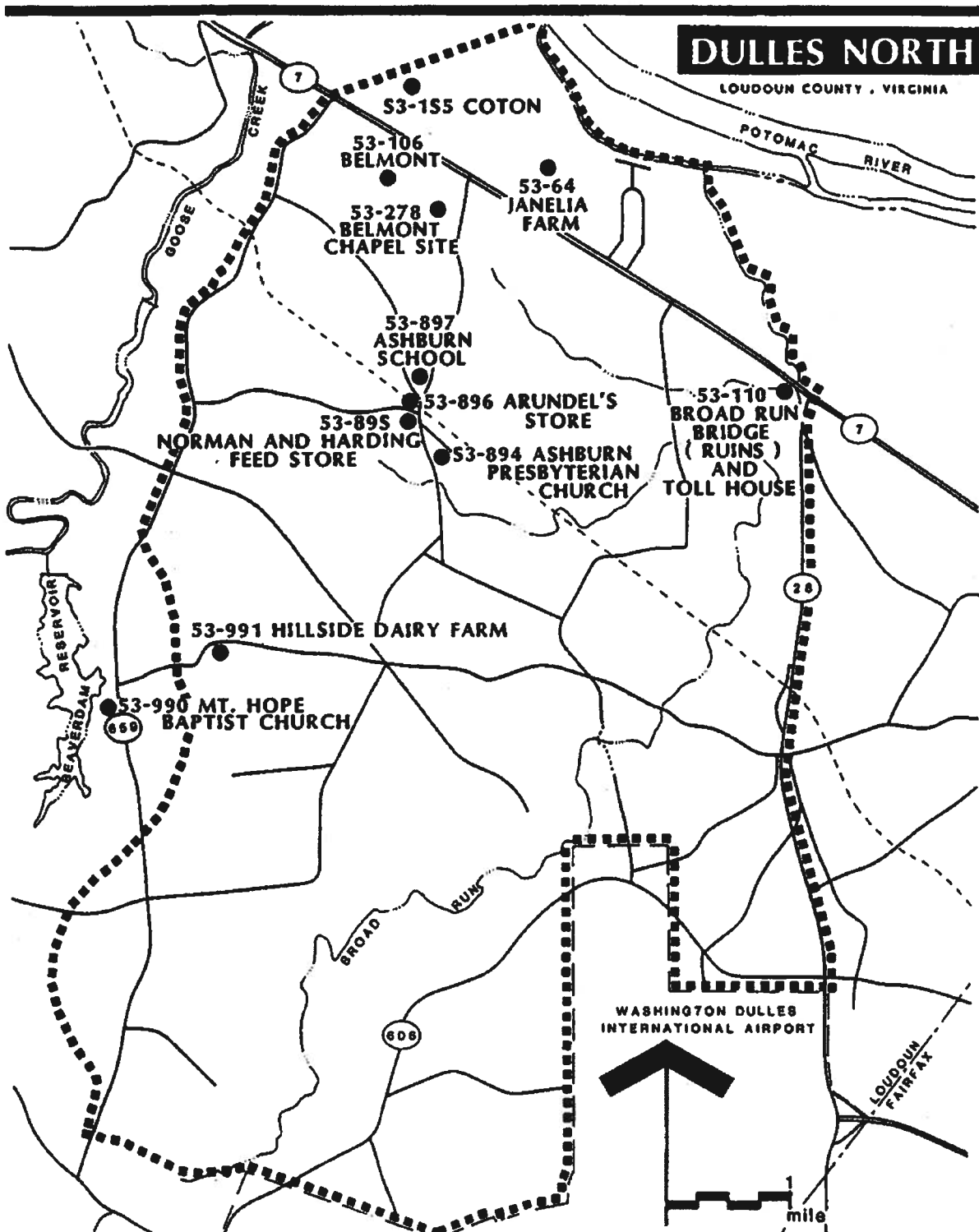
If you have any questions, please call me at (703)383-2424.

Sincerely,

A handwritten signature in black ink, appearing to read "Kevin Nelson".

Kevin Nelson
Transportation Engineer

cc: Mr. Imad Salous
zmap2008-021zm1KincoraVillCtr3-11-08JB



HISTORIC RESOURCES

FIGURE 9

OCTOBER 21, 1985

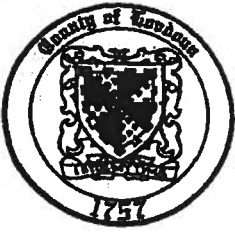
- HISTORIC SITE SURVEYED BY VIRGINIA HISTORIC LANDMARKS COMMISSION
- PLANNING AREA BOUNDARY

TABLE 6

**SITES AND STRUCTURES SURVEYED BY
VIRGINIA DIVISION OF HISTORIC LANDMARKS****VHLC #**

- | | |
|--------|---|
| 53-84 | Janelia Farm - (Part of the Lee family's Coton Farm). House built in 1936; 66 acre easement along river front donated to Northern Virginia Regional Park Authority. |
| 53-106 | Belmont - Built by Ludwell Lee 1799-1803. State and National Registers. |
| 53-110 | Broad Run Bridge (ruins) and Toll House - Built by Leesburg Turnpike Co. 1820. State and National Registers. (See Eastern Loudoun Area Management Plan.) |
| 53-155 | Coton - Home of Ludwell Lee's cousin, Thomas Ludwell Lee. Some original buildings survive. Now property of Xerox Corporation. |
| 53-276 | Washington and Old Dominion Railroad (W&OD) - Originally Alexandria, Loudoun and Hampshire Railroad begun in 1855 and built as far west as Leesburg by 1860. |
| 53-278 | Site of Belmont Chapel - Built 1840, destroyed by fire 1967. |
| 53-894 | Ashburn Presbyterian Church - Built 1876, fine example of board and batten Carpenter gothic. |
| 53-895 | Norman and Harding Feed Store - Built about 1880; typical commercial building; now used by Weller tile. |
| 53-896 | Arundel's Store - Ruins of combined house and store in Ashburn; 1870's. Now destroyed. |
| 53-897 | Ashburn School - One room school house, built 1892; poor condition; used as warehouse. |
| 53-990 | Mt. Hope Baptist Church - 1893. One of the largest frame churches in the County; very good Carpenter Gothic; recently very carefully restored. |
| 53-991 | Hillside Dairy Farm - mid 19th century; stone farmhouse unusual in eastern Loudoun. |
-

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Department of Planning
1 Harrison Street, S.E., 3rd Floor, P.O. Box 7000, Leesburg, VA 20177-7000
Telephone (703) 777-0246 • Fax (703) 777-0441
E-mail dop@loudoun.gov

LOUDOUN COUNTY HISTORIC DISTRICT REVIEW COMMITTEE

Leah Ferguson, Chairman
Matthew Custer, Vice Chairman

Mary Dudley
Jean Brown

Matt Tolley
Rebecca McDermott

Karl Riedel

September 30, 2009

Honorable Scott York
Chairman
Loudoun County Board of Supervisors
1 Harrison Street
Leesburg, VA 20177

Peggy Maio
Chairman
Loudoun County Planning Commission
1 Harrison Street
Leesburg, VA 20177

Dear Chairman York and Chairman Maio:

On behalf of the Historic District Review Committee (HDRC), please consider this correspondence as the HDRC's formal comment on ZMAP 2008-0021, Kincora. Under Section 6-307 of the Loudoun County Zoning Ordinance, the HDRC is tasked to make recommendations to the Board of Supervisors on development applications in historic overlay districts and to assist and advise the Planning Commission and Board of Supervisors on matters involving historically significant sites, buildings and areas.

The HDRC's comments on ZMAP 2008-0021 are specific to the applicant's proposed alignment of the extension for Pacific Boulevard and the impacts the alignment will have on the Broad Run Toll House and Bridge Ruins. The Toll House and Bridge were constructed in the early 19th century as part of the construction of the Leesburg Turnpike and mark an earlier time in the County's history of transportation growth and improvements. This resource was listed in the National Register of Historic Places in 1969 and the County designated the Toll House and Bridge property as a County historic site district in 1972. Thus, the HDRC has a keen interest in the treatment of the property and concern over the impacts the Kincora proposal may ultimately have on this historic site district.

At our September 14, 2009 meeting, the HDRC had the opportunity to review the Kincora application and current referral agency comments. After discussing the challenges and impacts that the applicant's proposed road alignment will pose to the preservation of the Broad Run Toll House and Bridge Ruins, the HDRC wishes to endorse the comments contained in the joint referral from staff in the Department of Planning and the Department of Parks, Recreation and Community Services dated August 25, 2009. The HDRC believes that the referral outlines the appropriate steps to ensure adequate assessment of the historic site, protection of the structure from further decay, and provides options for preservation and re-use of the Toll House.

As stated previously, the Broad Run Toll House and Bridge property is a County designated historic site district. As such, any proposal to demolish or re-locate the structures on the property necessitate HDRC review and approval. The County's Historic District Guidelines contain the standards for review of such applications. The Guidelines specifically state that moving historic structures from their historic settings should be avoided as the building then loses its place in time (Chapter 10).

Should the Board of Supervisors approve the Kincora application with the currently proposed road alignment for Pacific Boulevard, preservation of the Toll House and the ruins of the bridge in their historic context will not be possible. The Toll House will be demolished or severed from its historic setting adjacent to the toll bridge and a segment of the old turnpike roadbed. The HDRC recommends that alternative alignments be evaluated to avoid the loss of this important eastern Loudoun landmark. The HDRC would be very happy to work with the applicant, the Planning Commission and the Board of Supervisors to find a solution that will ensure that our 21st century transportation improvements accommodate the transportation improvements designed and built by our ancestors two centuries ago.

Sincerely,



Leah Ferguson, Chairman
Historic District Review Committee

Enc: August 25, 2009 Joint Referral (Board of Supervisors only)

cc: Loudoun County Board of Supervisors
Loudoun County Planning Commission
Linda Neri, Interim County Administrator
Charles Yudd, Deputy County Administrator
Julie Pastor, AICP, Director of Planning
Michael "Miguel" Salinas, Program Manager, CIO
Judi Birkitt, Project Manager
Marie Genovese, Planner, Community Planning
Brian Fuller, Planner, PRCS

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COMMONWEALTH of VIRGINIA

Department of Historic Resources

2801 Kensington Avenue, Richmond, Virginia 23221-0311

... Preston Bryant, Jr.
Secretary of Natural Resources

Kathleen S. Kilpatrick
Director

Tel: (804) 367-2323
Fax: (804) 367-2391
TDD: (804) 367-2386
www.dhr.virginia.gov

October 6, 2009

Ms. Judi Birkitt
Loudoun County Department of Planning
1 Harrison Street S.E.
Leesburg, VA 20177

Dear Ms. Birkitt,

Thank you for allowing the Department of Historic Resources to comment on the possibility of moving the Broad Run Toll House and Bridge, which, as you know, was listed on the Virginia Landmarks Register and the National Register of Historic Places in 1970. I am pleased that Loudoun County long ago also recognized the historical significance of this complex and designated it as a County Historic Site District in 1972. Although the bridge is now in ruins and the setting of the bridge and tollhouse has been compromised to some degree by the realignment and widening of eastbound Route 7, the tollhouse still retains its historic character and the road alignment is still very much intact.

Removing the tollhouse and relocating it elsewhere would compromise its integrity and essence as a nineteenth-century tollhouse since such buildings by necessity and convenience were established at bridges along turnpikes to collect tolls. The removal of this important tollhouse from its present location along the turnpike at the bridge over Broad Run would so compromise its integrity as to not allow the complex to remain listed on the Virginia Landmarks Register and the National Register of Historic Places. Delisting the tollhouse from the registers would not allow the owners of the property to take advantage of certain benefits such as state and federal tax credits for rehabilitating it.

I hope a compromise can be reached so that the tollhouse can remain in its original location, thereby enabling all visitors to fully appreciate its historic setting and better understand the importance of turnpikes in Loudoun County's rich history.

Sincerely yours,

David Edwards, Director
Northern Regional Office

Administrative Services
10 Courthouse Avenue
Petersburg, VA 23803
Tel: (804) 862-6416
Fax: (804) 862-6196

Capital Region Office
2801 Kensington Ave.
Richmond, VA 2
Tel: (804) 367-2
Fax: (804) 367-2

Tidewater Region Office
14415 Old Courthouse Way, 2nd Floor

ATTACHMENT 4e

Roanoke Region Office
1030 Penmar Ave., SE
Roanoke, VA 24013
Tel: (540) 857-7585
Fax: (540) 857-7588

Northern Region Office
5357 Main Street
PO Box 519
Stephens City, VA 22655
Tel: (540) 868-7029
Fax: (540) 868-7033

A-206

KINCORA
(ZMAP 2008-0021)
PROFFER STATEMENT

February 5, 2009
July 23, 2009
October 5, 2009
January 13, 2010



INCORA
(ZMAP 2008-0021)
PROFFER STATEMENT

January 13, 2010

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Exhibits

- Exhibit A:** Concept Plan
- Exhibit B:** Zoning Ordinance ("ZO"), Facilities Standards Manual ("FSM") and
Land Subdivision & Development Ordinance ("LSDO") Modifications
- Exhibit C:** Amended Deed of Open Space Easement
- Exhibit D:** Design Guidelines
- Exhibit E:** PD-MUB District Incentives
- Exhibit F:** Broad Run Restoration Concept Plan dated June 2009, as revised through
January 2010
- Exhibit G:** Central Plaza and Design Illustrations

KINCORA
(ZMAP 2008-0021)

PROFFER STATEMENT

February 5, 2009
July 23, 2009
October 5, 2009
January 13, 2010

Pursuant to Section 15.2-2303, Code of Virginia, (1950), as amended, and Section 6-1209 of the Loudoun County Zoning Ordinance (1993), as amended (the "Zoning Ordinance"), NA Dulles Real Estate Investor LLC, a Delaware limited liability company (the "Owner"), who is the owner of Loudoun County Tax Map Parcels 042-29-6582, 042-49-0209 and 041-29-8238, consisting of a total of approximately 396.87 acres of real property, of which a portion consisting of approximately 336.60 acres (the "Property") is the subject of rezoning application ZMAP 2008-0021, hereby voluntarily proffers that development of the Property shall be in substantial conformity with the proffers as set forth below (the "Proffers") and with the exhibits and zoning ordinance modifications attached hereto, all of which are incorporated herein by reference. All Proffers made herein are contingent upon the final approval by the Board of Supervisors of Loudoun County, Virginia (the "Board") of the change in the zoning districts requested in rezoning application ZMAP 2008-0021 from the PD-IP (Planned Development - Industrial Park), and FOD (Floodplain Overlay District) zoning districts under the 1972 Loudoun County Zoning Ordinance to the PD-MUB (Planned Development - Mixed Use Business), FOD and AI (Airport Impact) zoning districts under the 1993 Loudoun County Zoning Ordinance. Upon final approval of the requested change in zoning districts, these Proffers shall supersede all proffers previously in effect with respect to the Property, if any. All Proffers herein shall be binding on the Owner and its successors and assigns.

I. LAND USE

A. Concept Plan.

The Property shall be developed in substantial conformity with Sheets 1, 2 and 8-35 of the plan attached hereto as Exhibit A dated October 2008, as revised through January 8, 2010, and prepared by Urban Engineering Associates, Inc. (all 35 Sheets of such plan are collectively referred to hereafter as the "Concept Plan"). Sheets 3-7 are for information and illustrative purposes only. Sheets 8, 9, 10, 11 and 12 of the Concept Plan illustrate the layout proposed for development of the Property and indicate development limitations on the Property, such as public road rights-of-way, open space, floodplain restoration activities and limits of clearing and grading for uses outside of the floodplain, which shall be observed during development of the Property as more particularly described in the Proffers.

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(ZMAP 2008-0021)
PROFFER STATEMENT

January 13, 2010

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The Owner shall have reasonable flexibility to modify the location of uses and layout shown on the Concept Plan to accommodate final engineering and development ordinance requirements, provided such changes are: (i) in substantial conformity with the approved Concept Plan and the Proffers; (ii) do not increase total permitted square footage; and (iii) do not decrease the minimum amount of open space or peripheral setbacks shown to be provided on the Property.

Building locations and footprints and associated parking areas and structures identified on the Concept Plan are for illustrative purposes and are subject to change by the Owner. Final building locations and footprints and associated parking areas and structures must comply with the specific commitments provided in these Proffers.

B. Uses, Maximum Density/Intensity of Use and PD-MUB Minimum Use Percentages.

The Owner may develop the Property with any of the uses permitted in accordance with the applicable zoning district, including any uses permitted by special exception for which approval of the requisite special exception is obtained. The Property may be developed up to the following maximum densities and intensities of use:

- Up to 3,973,025 square feet of non-residential uses.
- Up to 1,400 multi-family residential units (not to exceed 1,544,000 square feet), inclusive of any required Affordable Dwelling Units ("ADUs") and unmet housing needs (workforce housing) units proffered herein in Proffer I.D. and I.E. and subject to the limitations set forth in Proffer I.B.4. below.

1. Employment Uses. A minimum of 40% of the total floor area to be constructed on the Property shall be devoted to the employment uses permitted in the PD-MUB District, by-right or by a future approved special exception.

2. Commercial Uses. A minimum of five percent (5%) of the total floor area to be constructed on the Property shall be devoted to the commercial uses permitted in the PD-MUB District, by-right or by a future approved special exception. Not more than 398,825 square feet of the 3,973,025 square feet of non-residential uses shall be non-hotel commercial uses. Of the 398,825 square feet of non-hotel commercial uses, at least 200,000 square feet shall be "employment supportive" uses, such as, but not limited to, the following examples: delis, coffee shops, restaurants, convenience stores, grocery stores, office supply stores, drug stores/pharmacies, greeting card stores, automobile service stations, retail sales establishments that are located on the first floor of a multi-story office building or multi-family residential building and similar uses that provide convenient sales and dining services to the employees and residents on-site (collectively, "Employment Supportive Uses"). With the exception of (i) one (1) grocery store, (ii) one (1) health and fitness center, and (iii) one (1) specialty retail sales establishment offering merchandise and programs related primarily to outdoor recreational uses

KINCORA
(ZMAP 2008-0021)
PROFFER STATEMENT

January 13, 2010

Page 3

and activities (such as, but not limited to, hiking, biking and/or water-related sports), each of which may contain up to 60,000 square feet, no individual retail sales establishment shall exceed 30,000 square feet of gross floor area. No freestanding retail sales establishments shall be located along the Pacific Boulevard, Route 28 or Gloucester Parkway frontages of the Property. Retail sales establishments located within multi-story office buildings that front on Pacific Boulevard and Route 28 shall be oriented away from the building's frontage on such public roads.

3. Hotel. The Owner may develop up to 2 hotel uses as part of the 3,973,025 square feet of non-residential uses. Such hotel uses shall not exceed a total of either 475,000 square feet or 570 rooms. At least one (1) of the hotels shall be a "full service hotel," which shall mean that it will have a range of services and amenities, including (i) a sit-down restaurant containing a minimum of 3,500 square feet, (ii) room service, (iii) concierge services and (iv) meeting rooms containing a minimum total of 3,500 square feet.

4. Residential Uses. A minimum of 10% of the total floor area to be constructed on the Property shall be devoted to the residential uses permitted in the PD-MUB District, by-right or by a future approved special exception. All residential uses on the Property shall consist of multi-family dwelling units and shall be located in Land Bays A, C, D, E and/or F, as such land bays are identified on Sheets 8-12 of the Concept Plan. For any portion of the Property on which the Owner desires to develop multi-family dwelling units to be sold as separate units (such as condominium ownership), no building permit for, nor any conversion to, such for-sale units shall be permitted unless and until any community development authority ("CDA") debt payment obligations applicable to such portion of the Property, if any, have been fully satisfied. The Owner shall provide the County with 60 days written notice prior to any conversion of rental units to such for-sale units for the purpose of confirming that the CDA payment obligations for such units have been fully satisfied prior to such conversion. If a zoning permit has not been issued for the community recreation facility/baseball stadium approved with SPEX 2008-0054 prior to commencement of construction of greater than 1,550,000 square feet of non-residential uses, then the maximum number of residential dwelling units on the Property shall not exceed 1,100 dwelling units, inclusive of ADUs and unmet housing needs (workforce housing) units.

5. Public/Civic/Institutional Uses. A minimum of five percent (5%) of the total floor area to be constructed on the Property shall be devoted to public/civic/institutional uses as permitted in the PD-MUB District, by-right or by a future approved special exception. Examples of the public/civic/institutional uses that may be provided include educational institutions; public uses such as government offices, post offices, public meeting halls, public libraries, and public museums; parks such as village greens, plazas, and sculpture and flower gardens; community centers; church, synagogue, temple or mosque sites; cultural centers such as a performing arts center; outdoor amphitheaters; and the public use site identified in Land Bay N and described in Proffer VI.A. If public/civic/institutional uses are provided in buildings, the actual floor area of the portion of the building containing such civic/public uses shall be counted toward the minimum five percent (5%).

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6. **Parks and Open Space.** A minimum of 10% of the land area of the Property shall be devoted to parks and/or open space. No more than 50% of such parks and/or open space will be located within the River and Stream Corridor Resource. No more than 25% of the required buffers (such as landscape buffers along Pacific Boulevard) and "leftover spaces" (such as parking lot islands) shall be credited toward the minimum 10% parks and/or open space required by this Proffer. Such open space areas may include tot lots, pocket parks, stormwater management facilities constructed as wet ponds with year round amenities, pathways and similar passive recreational amenities. Notwithstanding the open space and/or parks provided pursuant to this Proffer, the Applicant will be required to meet the requirements of Section 4-1355(A)(5) of the **Zoning Ordinance**, provided that those elements of the open space and/or parks provided pursuant to this Proffer that satisfy the applicable definition of open space shall be included in the calculation of open space provided for purposes of compliance with Section 4-1355(A)(5) of the **Zoning Ordinance**.

7. **Site Plan/Record Plat Tabulations.** Prior to the approval of each record plat or site plan for development on the Property, the Owner will submit a tabulation depicting (i) the total minimum amounts of employment, commercial, residential, public/civic/institutional and parks and open space uses to be provided on the Property pursuant to these Proffers, (ii) the amount of employment, commercial, residential, public/civic/institutional and parks and open space provided with previously approved record plats and site plans, (iii) the amount of employment, commercial, residential, public/civic/institutional and parks and open space provided with the subject record plat or site plan, and (iv) the remaining amount of employment, commercial, residential, public/civic/institutional and parks and open space to be provided on the balance of the Property, to insure the minimum percentages of uses will be provided.

8. **PD-MUB Incentives for Additional Floor Area.** Any additional intensity of use associated with the requested PD-MUB incentives regarding structured parking (**Exhibit E**, #2), affordable/unmet housing needs (**Exhibit E**, #3), full service hotel (**Exhibit E**, #4) and shuttle bus service (**Exhibit E**, #5) will not be available to the Owner until a site plan is submitted confirming that the requirement for the incentive on which the Owner is relying has been satisfied, as explained in **Exhibit E**.

C. Route 28 Prepayment of Taxes.

Within 60 days of approval of this rezoning application ZMAP 2008-0021, the Owner shall provide prepayment of taxes that would have been attributable to the portion of the Property to be used for the multi-family residential dwelling units in accordance with the formula and provisions as adopted by the Board of Supervisors for optional residential development within the Route 28 Tax District.

D. Affordable Dwelling Units/Unmet Housing Needs (Workforce Housing) Units.

All residential buildings, and all mixed-use buildings with residential units located above permitted employment, commercial and/or civic uses, located on the Property shall have a

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minimum total of four (4) stories and an elevator. Notwithstanding the exemption from the County's Affordable Dwelling Unit Program provided for such residential and mixed-use buildings under § 7-102(D)(1) of the Zoning Ordinance, the Owner shall provide six and one quarter percent (6.25%) of the total residential dwelling units constructed on the Property, up to a maximum of 88 dwelling units (the "ADU-Equivalent Units"), to be affordable for purchasers whose income is between 30% and 70% of the area median income for the Washington Primary Metropolitan Statistical Area ("AMI") or renters whose income is between 30% and 50% of the area median income AMI.

In addition, the Owner shall provide 10% of the total residential dwelling units constructed on the Property, up to a maximum of 140 dwelling units, as unmet housing needs units (workforce housing) (the "Unmet Housing Needs Units") which shall be available for purchasers or renters whose income does not exceed 100% of the AMI. All of the Unmet Housing Needs Units shall be provided as multi-family units in mixed use buildings.

The ADU-Equivalent Units and the Unmet Housing Needs Units shall be administered either (a) consistent with the terms provided in the Affordable Dwelling Unit provisions of Article 7 of the Zoning Ordinance and in accordance with Chapter 1450 of the Loudoun County Codified Ordinances, except that (i) the income limit for qualified purchasers or renters of the Unmet Housing Needs Units shall be 100% of AMI, and (ii) all or any portion of the ADU-Equivalent Units and/or the Unmet Housing Needs Units may be located in a single building notwithstanding any provision of Article 7 to the contrary, or (b) subject to a federal or state affordable housing program. The affordability requirement for all ADU-Equivalent Units and all Unmet Housing Needs Units will be set forth in a covenant approved by the County Attorney and recorded among the land records of Loudoun County, and shall remain in effect for a minimum of 15 years from the date such covenant is first recorded.

E. Windy Hill Foundation.

The Owner shall reserve, from the date of the approval of this rezoning application ZMAP 2008-0021 to December 31, 2012, a minimum of three (3) acres in Land Bay E for conveyance to the Windy Hill Foundation, pursuant to a separate private agreement between the Owner and the Windy Hill Foundation, for the purpose of constructing a mixed-use, mixed-income multi-family residential building consistent with the commitments provided in Proffer I.D. above.

F. Linkage of Office and Other Non-Residential Uses to Residential Development.

Development of the residential uses on the Property shall be conditioned upon development of office and other non-residential uses constructed on the Property and/or on the portions of Loudoun County Tax Map Parcel 041-29-8238 which are not included in ZMAP 2008-0021 (the "PD-IP Portion," subject to SPEX 2008-0054). Development of the residential uses on the Property shall be as follows:

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1. Zoning permits for at least 780,000 square feet of non-residential uses shall have been issued for the Property and/or for the PD-IP Portion prior to issuance of the zoning permit for the 701st residential dwelling unit, exclusive of ADUs and unmet housing needs (workforce housing) units, for the Property. Such 780,000 square feet of non-residential uses shall consist of (i) a maximum of 195,000 square feet of non-hotel commercial establishments, and (ii) a minimum of 150,000 square feet of employment uses located in one or more office buildings, each containing at least 100,000 square feet each with a minimum of 4 floors. Such 195,000 square feet of non-hotel commercial establishments shall consist of a minimum of 100,000 square feet of Employment Supportive Uses.

2. Zoning permits for at least 1,500,000 square feet of non-residential uses shall have been issued for the Property and/or for the PD-IP Portion prior to issuance of the zoning permit for the 926th residential dwelling unit, exclusive of ADUs and unmet housing needs (workforce housing) units, for the Property; provided, however, that if a zoning permit for the community recreation facility/baseball ballpark approved with SPEX 2008-0054 has been issued and construction of such facility is commenced and diligently pursued to completion, then zoning permits may be issued for up to a maximum of 1,075 residential dwelling units, exclusive of ADUs and unmet housing needs (workforce housing) units, for the Property until zoning permits for at least 1,500,000 square feet of non-residential uses, including the floor area of the community recreation facility/baseball ballpark, shall have been issued for the Property and/or for the PD-IP Portion. Such 1,500,000 square feet of non-residential uses shall consist of (i) a maximum of 300,000 square feet of non-hotel commercial uses, and (ii) a minimum of 800,000 square feet of employment uses located in one or more office buildings, containing at least 100,000 square feet each with a minimum of 4 floors. Such 300,000 square feet of non-hotel commercial uses shall consist of a minimum of 180,000 square feet of Employment Supportive Uses.

3. When zoning permits have been issued for more than 1,500,000 square feet of non-residential uses, consistent with Proffer I.F.2. above, there shall be no further linkage limitation on the timing of residential uses on the Property. The ADUs and unmet housing needs (workforce housing) units described in Proffers I.D. and I.E. may be constructed regardless of the amount of non-residential uses constructed on the Property and/or the PD-IP Portion.

G. Center for Performing Arts and Related Civic Uses.

The Owner shall reserve, for a period of 15 years from the date of issuance of the first zoning permit for the Property, a minimum of 2 acres in Land Bay J for donation to a non-profit entity for the purpose of constructing a community center for performing arts and related civic uses. In the event during such 15-year period a community center for performing arts and related civic uses is approved for construction on the Property and donations have been received and/or agreements have been executed that will fully fund the design, engineering and construction of such center, then the Owner will donate, for no monetary compensation, such reserved parcel to

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such non-profit entity for the purpose of constructing such center. The following conditions shall apply to this reservation:

1. If a zoning permit is issued for such a center containing a performing arts theater of at least 350 seats on property located within 5 miles of the Property, then the Owner shall no longer be required by this Proffer to reserve a 2-acre site for such a center. The Owner shall advise the County of such performing arts theater within five (5) miles concurrently with submission of any site plan for development of the two (2) acre reservation area.

2. Prior to the donation of the site for a community center for performing arts and related civic uses, the Owner shall identify parking areas on the Property, within and/or outside of such two-acre site, that will be available to the users of such community center to meet the parking required for such facility under the Zoning Ordinance.

3. The Owner shall (i) construct street access and sidewalks to the community center, (ii) extend sewer, water, telephone, natural gas and electric service to the perimeter of the community center site, and (iii) design and construct, off-site from the community center site, such stormwater detention facilities as may be necessary to accommodate and detain stormwater runoff from the community center site, including planned paved areas and buildings, all concurrent with the Owner's own development activities on the portion of the Property abutting the community center site.

H. Central Plaza and Other Significant Plaza Areas.

Prior to or concurrent with issuance of an occupancy permit for either the 401st residential dwelling unit exclusive of ADUs and unmet housing needs (workforce housing) units or the 325,001st square foot of non-residential uses, the Owner shall provide a central plaza consisting of a minimum of 10,000 square feet generally in the location in Land Bay J identified on the Concept Plan. The Owner shall provide public amenities in the central plaza that may include, but not be limited to, ponds, fountains, public art, plant beds, benches, drinking fountains, clock pedestals, and other similar features. The central plaza shall be consistent with the character and quality of the description of such central plaza shown on Sheets 19, 20 and 23 of the Concept Plan and in Exhibit G. All buildings that adjoin the central plaza shall be a minimum of two (2) stories.

Prior to or concurrent with issuance of an occupancy permit for Land Bays C or D, the Owner shall provide a plaza consisting of a minimum of 10,000 square feet generally in the location adjacent to Land Bay D (between Road 4 and Road 5) identified in the Concept Plan.

Prior to or concurrent with issuance of an occupancy permit for Land Bays A or F, the Owner shall provide a plaza consisting of a minimum of 10,000 square feet generally in the location in Land Bay F identified on the Concept Plan.

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I. Building Heights.

Buildings with frontage along the west side of, and within 100 feet of, Pacific Boulevard within Land Bays B, F, and J, with no intervening buildings between such buildings and Route 28, shall be constructed to heights of a minimum of 4 stories or 50 feet. Buildings located in Land Bays B, F, J and Q shall not exceed 160 feet in height. Buildings within Land Bay Q, with no intervening buildings between such building and Route 28, shall be constructed of heights of a minimum of 4 stories or 50 feet. Buildings located in Land Bays A, C, D, E, G, H, K and N shall not exceed 75 feet in height.

J. Vertically Mixed Building Design.

A minimum of 50% of the buildings constructed on the Property shall be comprised of a vertical mix of uses consisting of at least 2 different use categories such as employment, residential, commercial and civic/institutional space. The Owner shall provide a tabulation with each site plan submission depicting the number of buildings located on the Property that contain a vertical mix of at least two (2) different uses. This tabulation shall be updated with each site plan submission to demonstrate those existing buildings, and those proposed buildings that contain a vertical mix of uses, as well as the number of buildings to be constructed under future site plans necessary to achieve the above-stated 50% minimum requirement. At full build-out, a minimum of 70% of the buildings located adjacent to Roads 2, 6, 8 and 9 as shown on the Concept Plan shall consist of a vertical mix of uses.

K. Zoning Modifications.

The Owner is requesting approval of certain modifications to the Zoning Ordinance ("ZO"), Land Subdivision and Development Ordinance ("LSDO"), and the Facilities Standards Manual ("FSM") as identified in Exhibit B entitled "Zoning Ordinance ("ZO"), Facilities Standards Manual ("FSM") and Land Subdivision & Development Ordinance ("LSDO") Modifications" dated January 13, 2010. To the extent such modifications are approved, the Owner will only utilize such modifications in accordance with the statements made in justification of, and consistent with the illustrations titled "Zoning Modifications Kincora Village," dated January 11, 2010, included in the requests for such modifications, as contained in Exhibit B.

L. Floodplain Boundaries.

To the extent the elevations and/or boundaries of the floodplain on the Property, as identified on the current Floodplain Map of Loudoun County, are changed, relocated and/or updated as a result of either (i) construction performed by an entity that is exempt from the Zoning Ordinance (like the Virginia Department of Transportation ("VDOT")), or (ii) approvals under the applicable provisions for updating, correcting, interpreting or altering floodplain boundaries provided in the Zoning Ordinance, the Owner reserves the right, without requiring a proffer amendment or zoning concept plan amendment, to use, for any use permitted by-right or

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by an approved special exception in the underlying zoning district, those areas currently located within the existing boundaries of the floodplain as shown on the Floodplain Map of Loudoun County, which in the future are no longer within the floodplain, including the right to use the area within any buffer associated with such former floodplain area; provided (i) the total maximum nonresidential floor area and residential units committed in these Proffers are not exceeded, and (ii) the use of such areas complies with applicable federal and state laws and regulations that address the need for floodplain management and protection, including, without limitation, Federal Emergency Management Administration regulations, if applicable.

II. ENVIRONMENTAL

A. Heron Rookery.

Except for the construction, operation and maintenance of the wetlands and stream mitigation bank, on-site wetlands and stream mitigation, or riparian reforestation, no use, including the pedestrian trail system shall be located within the 700-foot Rookery Radius shown on Sheet 12 of the Concept Plan, which shall serve as a setback from the documented location of the heron rookery identified on Sheet 12 of the Concept Plan. During the heron nesting season from March 1st to June 30th each year, no land disturbing activity shall be performed within the area defined as the 1,400-foot Rookery Radius shown on Sheet 12 of the Concept Plan.

B. Central Water and Sanitary Sewer.

The Property shall be developed using central water and sewer facilities, which shall be provided to the Property at no cost to Loudoun County (the "County") or to Loudoun Water. Water and sewer lines, pumping stations and related utility equipment shall be extended to the Property in accordance with Loudoun Water's adopted Master Plan for provision of water and sewer service.

C. Limits of Clearing and Grading.

The limits of clearing and grading shall be depicted as shown on the Concept Plan on each site plan submission. Encroachments beyond the limits of clearing and grading shall only be permitted for utilities, necessary road improvements, stormwater management facilities, wetland and stream mitigation activities, trail development, or potential preservation activities associated with the Broad Run Toll House and bridge structure. Any necessary road crossings shall, to the extent practicable, be designed to minimize the extent of any encroachment beyond the limits of clearing and grading shown on the Concept Plan.

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D. Wetland and Stream Mitigation, Riparian Preservation and Reforestation, and Wetland Mitigation Bank.

Prior to issuance of the first occupancy permit for any of the uses on the Property, the Applicant shall, subject to issuance of, and pursuant to, all requisite permits and approvals, provide wetland mitigation, stream enhancement, riparian preservation and reforestation, and install the wetland mitigation bank in the amounts specified in, at the general locations depicted on, and of a character consistent with, the Kincora Broad Run Restoration Concept Plan dated June 2009, as revised through January 2010, prepared by Wetland Studies and Solutions, Inc. of Gainesville, Virginia (the "Restoration Concept Plan"), attached to these Proffers as **Exhibit F**. Such wetland mitigation, stream enhancement, riparian preservation and reforestation, and wetland mitigation bank shall be in substantial conformance with the design specifications, success criteria, and monitoring program contained in the Kincora On-Site Mitigation Plan (Grading Permit X20090680001) dated April 2008, as amended and approved by the County, with the exception that the planting plan (Sheets 26 through 40) shall be upgraded to incorporate the following minimum specifications for the category labeled "Additional Trees (Required for All Alternatives)" depicted on Sheets 37 through 39: 3 gallon, containerized, native deciduous trees planted at a density of 222 trees per acre on a 14-foot by 14-foot staggered grid.

In the event that stream and wetland mitigation, riparian preservation and reforestation, and/or wetland mitigation bank activities exceeding the quantities identified in **Exhibit F** are required to offset impacts associated with the uses on the Property (PIN #041-29-8238), inclusive of utilities, necessary road improvements, stormwater management facilities, trail development and preservation activities associated with the Broad Run Toll House and bridge structure activities, the Applicant shall provide the additional mitigation elsewhere on the Property and/or on Tax Map Parcel PIN #'s 042-29-6582 and/or 042-49-0209 to the maximum extent possible. If such additional mitigation cannot be provided on the aforementioned Tax Map Parcels, the Applicant shall provide the mitigation according to the following prioritized order: (1) within the Broad Run Watershed within the same geographic Planning Policy Area, (2) within the Broad Run Watershed within Loudoun County, and (3) within Loudoun County, subject to approval by the U.S. Army Corps of Engineers and the Virginia Department of Environmental Quality. Subsequent amendments to the Kincora Broad Run Restoration Concept Plan, as may be approved by the Department of Building and Development, the Virginia Department of Environmental Quality and the Army Corps of Engineers, shall not require approval of a zoning concept plan amendment.

All mitigation activities within the limits of the proffered Kincora Broad Run Stream Valley Park (see Proffer IV.B.) will be coordinated with the Department of Parks, Recreation and Community Services. As soon as reasonably available each year until all state and federal permits have been released, a copy of the Annual Mitigation and Monitoring Report for Success Criteria required to be prepared and submitted by the Owner's environmental consultant pursuant to the requirements of the Army Corps of Engineers and Virginia Department of Environmental

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Quality shall be provided to the County's Director of Building and Development and to the Chief Park Planner, Department of Parks, Recreation and Community Services.

E. Open Space Easements.

Prior to the approval of the first site plan or construction plans and profiles for any use on the Property, the Applicant shall grant the County a perpetual Open Space Easement pursuant to Title 10.1, Chapter 17 Open- Space Land Act of the Code of Virginia ("Easement"), over and upon all of the land areas identified on the Restoration Concept Plan (**Exhibit F**) by the following labels: "Riparian Preservation Area," "Conservation Area," "Riparian Reforestation Area," "RSCRE Reforestation Area," "Stream Enhancement Area," "Wetland Mitigation Area," "Wetland Mitigation Bank Area" and over and upon all of the land areas identified on the Concept Plan as "Tree Preservation Area." The terms of such Easement shall grant the County a right of access to the Property subject to the Easement and the right to provide and/or complete the required wetland mitigation, stream enhancement, RSCRE reforestation, riparian preservation and reforestation, and wetland mitigation bank in the amounts specified and in the areas depicted on the Restoration Concept Plan (**Exhibit F**) in the event such actions are not completed by the Applicant. Such easement(s) shall be in a form approved by the County Attorney and shall be recorded among the land records. Additionally, the Applicant shall post a bond with the County in an amount sufficient to cover the cost of providing and completing the RSCRE reforestation, riparian preservation and reforestation, stream enhancement, wetland mitigation, and wetland mitigation bank, as shown on the Restoration Concept Plan, should these activities not already be subject to any state or federal bond. Boundaries of the Easement shall be depicted on all site plans and construction plans and profiles submitted for the uses on the Property.

It is understood that, as necessary to permit the development on the Property of the uses described in these Proffers and shown on the Concept Plan, the County will cooperate with the Owner to confirm, clarify and amend, consistent with the form Amended Deed of Open Space Easement attached to this Proffer Statement as **Exhibit C**, the existing open space easement that was dedicated to the County pursuant to the Deed of Open Space Easement recorded in Deed Book 2314, at page 1589 among the land records in the Clerk's Office of the Circuit Court of Loudoun County, Virginia. To the extent required by the Open Space Land Act, and if necessary to allow for a release of any portion of the existing open space easement, the Owner will, prior to or concurrently with such release, subject alternative land, acceptable to the Board of Supervisors, to replace such portions of the existing open space easement to be released.

F. Tree Preservation.

Within Preservation Areas shown on Sheets 22 and 23 of the Concept Plan, the Applicant shall preserve a minimum of 80% of the existing canopy, exclusive of stands of Virginia Pine over 25 years in age. A maximum of 20% of the existing canopy may be removed to the extent necessary for the construction and/or installation of (a) utilities other than stormwater

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management ponds and similar facilities, (b) trails required pursuant to these Proffers, and (c) necessary road improvements.

If, during construction on the Property, it is determined by the Applicant's certified arborist or the County that any healthy tree located within the boundaries of any of the Tree Preservation Areas has been damaged during construction and shall not survive, then, the Applicant shall remove each such tree and replace each such tree with two (2) 2 1/2 - 3 inch caliper native, non-invasive deciduous trees. The placement of the replacement trees shall be proximate to the area of each such damaged tree so removed, or in another area as requested by the County.

After construction has been completed by the Applicant, Forest Management Techniques, performed by or recommended by a professional forester or certified arborist and approved by the County's Urban Forester and/or the Department of Building and Development, that are necessary to protect or enhance the viability of the canopy may be undertaken. Such Management Techniques may include, without limitation, pruning and the removal of vines, invasive species, trees uprooted or damaged by extreme weather conditions, and trees or limbs that are diseased, insect-infested, dead, or are considered a hazard to life or Property. Every site plan and any construction plans and profiles for any use on the Property that includes a portion of the land area required to be subject to the Easement shall contain a note stating that the removal of trees within the Open Space Easement is prohibited except in accordance with the provisions outlined in these conditions and the recorded Open Space Easement.

G. River and Stream Corridor Resources (RSCRE) Reforestation.

With the exception of the encroachments depicted on the Concept Plan, the River and Stream Corridor Resources (defined as including 100-year floodplains; adjacent steep slopes of 25% or greater, starting within 50 feet of streams and floodplains and extending no farther than 100 feet beyond the originating stream or floodplain; and the 50-foot management buffer surrounding floodplains and such adjacent steep slopes) within the Property shall be preserved and remain in their natural state. The Applicant shall replant open areas within or adjacent to the 100-year floodplain, without the need for a floodplain study, floodplain alteration or floodplain alteration waiver, in an amount equal to the area of the proposed development that encroaches into the River and Stream Corridor Resources, as shown on the Restoration Concept Plan. Such replanting shall be located first, to the extent feasible, in the general vicinity of the areas disturbed, second, in the areas identified as "RSCRE Reforestation Area" on the Restoration Concept Plan (**Exhibit F**), and third, within Tax Map Parcel PIN #'s 042-29-6582, 042-29-8238, and/or 042-49-0209. The amount of such replanting shall exceed the 3.0 acres shown on the Restoration Concept Plan as necessary to achieve an amount equal to the areas of the proposed development that encroach into the River and Stream Corridor Resources.

The Applicant shall submit a riparian planting plan, prepared by a professional forester, landscape architect, or certified arborist, for such replanting areas. Such replanting plan shall be submitted at the time of each site plan or construction plans and profiles proposing the

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development of any area that encroaches into the River and Stream Corridor Resources for review and approval by the County Urban Forester. Each such plan shall provide for 3 gallon, containerized, native, deciduous trees to be planted at a density of 300 trees per acre on a 12-foot by 12-foot staggered grid. Each approved riparian planting plan shall be implemented concurrent with the development of the areas subject to such site plans or construction plans and profiles prior to occupancy. In the event that a targeted stocking of 75% survival with uniform distribution is not achieved within 1 year, the Applicant shall provide supplemental planting to achieve the targeted stocking.

H. Stormwater Management Best Management Practices (SWM/BMPs)/Low Impact Development Techniques (LIDs).

The Property shall be developed in accordance with Best Management Practices (BMPs). Any stormwater management ponds constructed on the Property shall be designed and constructed as an enhanced extended detention dry pond or retention (wet) facility. Notwithstanding the SWM/BMPs depicted on the Concept Plan, Low Impact Development Techniques, such as but not limited to green roofs, rain gardens, cisterns, and planted swales shall be incorporated into the Property's overall stormwater management approach where practicable in order to meet the applicable stormwater management requirements of Loudoun County inclusive of those BMPs depicted on the Concept Plan. The locations and water quality benefits of such LID techniques shall be included in each site plan and construction plans and profiles submitted for the uses on the Property.

I. Stormwater Management Filter/Cartridge Maintenance.

To the extent the Applicant installs underground (cartridge or filter system) stormwater management facilities, the Applicant shall be responsible to maintain, repair, and replace such facilities at its sole cost and expense in accordance with Chapter 1096 Stormwater Management of the Codified Ordinances of Loudoun County. The County, its agents, employees, successors and assigns, shall be entitled to have access to such facilities at any time to inspect, to ensure the fulfillment of the maintenance responsibilities, and, if necessary, at the County's sole discretion, to conduct such maintenance, repair and replacement as may be necessary, at the Applicant's expense. Prior to approval of the first site plan, the Applicant shall furnish a written maintenance agreement in a form approved by the County Attorney and a financial guarantee in the form of a cash escrow or irrevocable letter of credit satisfactory to the Director of General Services to secure its obligation to provide appropriate and necessary maintenance, repair, and replacement of such underground stormwater management facilities. The financial guarantee shall remain in force and effect for a period of 25 years, and the amount of the financial guarantee shall be One Thousand Six Hundred Twenty-Five and 00/100 (\$1,625.00) per underground filter or cartridge covered by the maintenance agreement unless the Director of the Department of General Services shall approve a lesser amount. The maintenance agreement shall be recorded among the land records and shall remain in force for so long as such underground facilities remain in use. The amount of this financial guaranty shall be adjusted every five (5) years to reflect

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escalation of such amount in accordance with the CPI from a base year of 2010 (see Proffer VIII.C.).

J. Broad Run Water Quality Monitoring.

Surface water quality monitoring shall be conducted by the Applicant for the purpose of monitoring water quality impacts of the uses on the adjacent Broad Run. The Applicant shall, in cooperation with County Staff, and concurrent with submission of the first site plan or construction plans and profiles for a use on the Property, whichever is first in time, develop a water quality monitoring plan for monitoring sites quarterly, that identifies the location of monitoring sites, sampling and assessment protocols, format of data reporting, and water quality thresholds as a basis for corrective action based on sampling. If at any time the monitoring results exceed the established water quality thresholds, the Applicant shall take immediate action to investigate the condition. If the condition is a result of activity on the Property, the Applicant shall take immediate action to remediate the condition to the established water quality thresholds. Monitoring activities shall begin at least 30 days prior to land disturbance associated with construction of the first use on the Property and shall be conducted through a time period of one year after release of the final construction performance bonds for the uses. The County shall have the authority, with adequate notice to the Owner, to enter the Property at any time to test the water quality of Broad Run and its tributaries.

K. Trails Located Within the River and Stream Corridor Resources.

Trails located within the River and Stream Corridor Resources shall be constructed with pervious surfaces and, where such trails cross jurisdictional waters and/or wetlands, raised boardwalks, with designs consistent with the sections provided on Sheet 15 of the Concept Plan. Public access easements shall be provided on all trails located within the floodplain.

L. Harvesting Trees from Cleared Areas.

The Owner shall harvest trees from those areas of the Property that are forested and are to be cleared by the Owner for development of the uses on the Property. The Owner shall retain any proceeds received from the sale of the harvested forest products.

M. Green Building Practices.

The Owner shall employ development attributes of the United States Green Building Council's Leadership in Energy and Environmental Design ("LEED") program into the planning of the employment and residential buildings that are a minimum of 4 stories or 50 feet in height on the Property. Those elements may include, but shall not be limited to, sustainable site design, water efficiency, energy management, materials and resource reuse, and/or interior environmental quality. The following alternative transportation-related elements will be included throughout the Property:

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- a. secure bicycle parking areas for all employment and commercial buildings and sheltered bicycle parking areas for multi-family residential buildings;
- b. shower facilities for employees in all buildings at least 4 stories or 50 feet in height and containing greater than 100,000 square feet of non-residential uses; and
- c. the locating of a bus or shuttle stop within one-quarter (1/4) mile of each employment and commercial building, to be provided by the two (2) bus shelters identified in Proffer III.I. and such additional stops as may be required to meet this standard.

While this Proffer shall not be construed as a commitment to obtain a certain level of LEED certification, the design and construction of all employment and residential buildings a minimum of 4 stories or 50 feet will incorporate sustainable building elements for LEED version 3, or the current version of LEED effective at the time of site plan submission for New Construction or for Core and Shell, and will be designed to achieve LEED goals, including reduction in potable water use, energy use reductions, construction waste diversion from sanitary landfills or incinerators, and enhanced indoor environmental conditions, to the extent the Owner determines that such LEED elements and goals can be incorporated without impairing the competitiveness of the Owner's buildings in the marketplace.

The Owner shall employ a LEED accredited professional in the design of each employment and residential building a minimum of 4 stories or 50 feet in height.

All residential buildings and individual dwelling units shall be outfitted with energy efficient appliances including, but not limited to, ENERGY STAR or an energy efficient rating equivalent qualified dishwashers, refrigerators and clothes washers. In addition, each residential building shall include conveniently located facilities to enable residents to recycle mixed waste products.

Notwithstanding the provisions as stated above, any portion of each residential building containing ADUs and/or unmet housing needs (workforce housing) units in accordance with Proffers I.D. and I. E. shall be constructed according to the EarthCraft program. Certification according to the EarthCraft program for that portion of each building containing ADUs and/or unmet housing needs (workforce housing) units shall be provided to the Loudoun County Department of Building and Development prior to the issuance of the initial zoning permit for such building.

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III. TRANSPORTATION

A. Road Network.

Unless otherwise specified in the Proffers, all roads required for access to and within the Property shall be constructed in accordance with the County's Land Subdivision and Development Ordinance and the FSM to provide access to the various portions of the Property as they are developed. All public roads required for access to and within the Property shall be designed and constructed in accordance with applicable VDOT and County standards. Except as provided in Proffer III.C., on-site public roadways shall be constructed as development of each section of the Property that includes such roadways occurs consistent with the timing specified in Proffer III.D.

Dedication of land for public roads and parallel trails shall include all related easements outside the right-of-way, such as slope, maintenance, storm drainage and utility relocation easements, necessary to construct the public roads and parallel trails shown on the Concept Plan within the Property and along the Property's existing public street frontage. Dedication of right-of-way and easements to the County for the public roads and parallel trails shown on the Concept Plan shall occur concurrently with development of each section of the Property unless already dedicated by others. However, if requested by the County to dedicate the right-of-way and related easements in advance of development on the Property, the Owner shall make such dedication if: (1) others have prepared and obtained final approval of construction plans and profiles consistent with the Concept Plan, which require dedication to commence construction; and (2) provided that the Owner shall not be obligated to incur costs or post bonds with the County in connection with such dedication.

B. Pacific Boulevard Alignment.

The final alignment of Pacific Boulevard as it crosses the northeast corner of the site and Broad Run and connects to Russell Branch Parkway shall be determined in an area within the Pacific Boulevard construction envelope (the "Pacific Boulevard Envelope") shown on the Concept Plan at the time VDOT right-of-way plans and/or Owner-initiated construction plans and profiles are approved, and such alignment may be shifted from the alignment shown on the Pacific Boulevard Envelope without requiring a zoning concept plan amendment or proffer amendment. If the Board of Supervisors approves the creation of a CDA to finance construction of Pacific Boulevard, and VDOT and/or the County have not approved the final alignment of the off-site portion of Pacific Boulevard in connection with the review and approval of the requisite plans for Pacific Boulevard, the CDA shall, at the time required by the terms of these Proffers, deposit with the County the necessary funds for the construction of that segment of Pacific Boulevard, within the Pacific Boulevard Envelope, to be held by the County and used only for the future construction of that segment of Pacific Boulevard. Any interest that accrues on such funds shall likewise be held and used only for the construction of that segment of Pacific Boulevard. Any portion of such funds or accrued interest that is not used for the construction of Pacific Boulevard, if any, shall be returned to the CDA.

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C. Construction of Public Roads With a CDA.

In the event the Board of Supervisors creates for the Property a CDA pursuant to § 15.2-5152 et seq., Code of Virginia (1950), as amended, the Owner shall dedicate right-of-way to the County and/or to VDOT, if and as necessary for the ultimate configuration of the following road improvements and, with the funding to be provided by such CDA, shall construct, bond for construction or cause to be constructed the following transportation improvements, within three (3) years of the date the CDA is created by the Board, with reasonable extensions to be granted should market conditions not permit issuance of CDA bonds at a reasonable rate of interest:

1. Gloucester Parkway. The extension of Gloucester Parkway as shown on the Concept Plan from the planned terminus of the Route 28/Gloucester Parkway interchange project, across the Property and Broad Run, and, subject to the provision of off-site right-of-way by others, to Loudoun County Parkway. Such extension of Gloucester Parkway shall be a full section of a four (4) lane divided highway and shall include the bridge and appurtenances required to cross Broad Run with such four (4) lane section and a ten (10) foot wide bicycle trail on the north side of such extension of Gloucester Parkway. The Owner shall dedicate right-of-way on the Property for Gloucester Parkway 120 feet in width to accommodate an ultimate 6-lane divided section. The Owner shall construct the four (4) lanes required by this Proffer as the outer lanes of the ultimate planned six (6) lane divided road section for Gloucester Parkway.

2. Pacific Boulevard. The Owner shall construct the extension of Pacific Boulevard as shown on the Concept Plan from the southern Property boundary across the Property and Broad Run, and subject to provision of off-site right-of-way by others, to the current terminus of Russell Branch Parkway within the Pacific Boulevard Envelope. Such extension to Russell Branch Parkway shall be a full section of a four (4) lane divided highway and shall include the bridge and appurtenances required to cross Broad Run with such four (4) lane section and a ten (10) foot wide bicycle trail on the west side of such extension of Pacific Boulevard; provided the Owner/CDA shall not be responsible for any portions of the four (4) lane section which have been or are committed to be constructed by others.

On or before the date that is 60 days from the date of final approval of this rezoning application (ZMAP 2008-0021), the Owner shall petition the Board of Supervisors to create a CDA for the purpose of financing construction of at least the road improvements identified in this Proffer. The Owner shall include all of the Property in the petition to create such CDA. The Owner shall be permitted to coordinate the timing and implementation of construction of these public roads pursuant to this Proffer with other construction projects by others, provided such public roads are constructed or bonded for construction within three (3) years of the date the CDA is created by the Board, with reasonable extensions to be granted should market conditions not permit issuance of CDA bonds at a reasonable rate of interest. Nothing provided in this Proffer shall prevent the Owner from obtaining any land use approvals (including, without limitation, site plan, subdivision, construction plans and profiles and grading permit) for the

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Property, nor from commencing construction on the Property, during the design and construction of these public roads. In the event the CDA is created to finance construction of the roads identified in this Proffer, the Owner shall be allowed to develop any uses permitted on the Property without regard to the provisions of Proffer III.D. below, as long as (i) such uses are consistent with the linkage limitations outlined in Proffer I.F., and (ii) the Owner provides the necessary intersection improvements to connect the private streets to Pacific Boulevard as shown on the Concept Plan. In the event the necessary right-of-way for the off-site portions of Gloucester Parkway and/or Pacific Boulevard have not been dedicated to VDOT and/or the County and have not otherwise been acquired by VDOT and/or the County, within 12 months of the date the CDA is created, the Owner's and/or the CDA's obligation to construct the off-site portions of the respective road for which the right-of-way is needed shall be deferred until such time as the right-of-way is acquired, and the Owner shall be permitted to pursue development of the Property notwithstanding that such portion of the road is not constructed. The CDA shall be responsible for maintenance of the segments of road constructed by the CDA until such time as such segments of road are accepted into the VDOT system for maintenance.

D. Construction of Public Roads Without a CDA.

If the Board of Supervisors has not created a CDA for the Property to fund the transportation improvements described in Proffer III.C. above, within 12 months of the final approval of this rezoning application ZMAP 2008-0021, and the Owner desires to proceed with development of the Property without CDA financing, the Owner shall construct or bond for construction the following transportation improvements in accordance with the transportation construction schedule set forth below, which includes in the non-residential use numbers all non-residential uses constructed on the Property and on the PD-IP Portion:

1. Uses In Land Bay Q. Unless already constructed by Owner or others, prior to the first site plan approval for construction of any use in Land Bay Q, the Owner shall construct or bond for construction the following transportation improvements:

a. Pacific Boulevard: Dedicate right-of-way for the ultimate configuration of this roadway on the Property as a four (4) lane divided road, and construct the two (2) additional lanes of Pacific Boulevard from the southern Property boundary to Gloucester Parkway as shown on the Concept Plan and in accordance with VDOT standards, together with deceleration, acceleration and turn lanes and transitions to an undivided section to the south as required by VDOT.

b. Bicycle Trail – Pacific Boulevard: To the extent not located within the public right-of-way, dedicate a 14-foot wide on-site public access easement in the setback area along the west side of Pacific Boulevard, and construct a 10-foot wide bicycle trail on the Property within the public right-of-way and/or within such public access easement along the portion of Pacific Boulevard constructed pursuant to the

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preceding paragraph. This trail shall be located generally as shown on Sheets 15 and 16 of the Concept Plan.

2. Transportation Improvements for Transportation Phase 1A (initial uses of the Property and PD-IP Portion up to and including 300,000 square feet of non-residential uses (which may include up to 270 hotel rooms) and 300 residential dwelling units). Prior to the first record plat or site plan approval, whichever is first in time, for construction of any use on the Property, and unless already constructed or installed by others, the Owner shall construct or bond for construction the following transportation improvements:

a. Pacific Boulevard: Dedicate right-of-way for the ultimate configuration of this roadway as a four (4) lane divided road, and construct Pacific Boulevard, except any portion already constructed or committed to be constructed by others, from its intersection with Gloucester Parkway as shown on the Concept Plan northward to a point sufficient to provide access to the portion of the Property proposed for such uses. Such portion of Pacific Boulevard on the Property shall consist of two (2) lanes of the ultimate four (4) lane divided road, as such four (4) lane divided road is depicted on the Concept Plan and in accordance with VDOT standards, together with deceleration, acceleration and turn lanes.

b. Bicycle Trail – Pacific Boulevard: To the extent not located within the public right-of-way, dedicate a 14-foot wide on-site public access easement in the setback area along the west side of Pacific Boulevard, and construct a 10-foot wide bicycle trail on the Property within the public right-of-way and/or within such public access easement along the portion of Pacific Boulevard constructed pursuant to the preceding paragraph to serve the portion of the Property proposed for such use. This trail shall be located generally as shown on Sheets 15 and 16 of the Concept Plan.

3. Transportation Improvements for Transportation Phase 1B (up to and including 1,125,000 square feet of non-residential, non-hotel uses, 270 hotel rooms and 700 residential dwelling units). Prior to issuance of the zoning permit for the 300,001st square foot of non-residential uses (inclusive of any hotel rooms constructed in Phase 1A) or the 301st residential dwelling unit, whichever is first in time, and unless already constructed or installed by others, the Owner shall construct or bond for construction the following transportation improvements:

a. Pacific Boulevard: Dedicate right-of-way for the ultimate configuration of this roadway as a four (4) lane divided road and construct Pacific Boulevard, except any portion already constructed or committed to be constructed by others, from its current terminus at the southern Property boundary across the Property, as a four (4) lane divided road northward, to the proposed intersection of Pacific Boulevard with Road 2,

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or to a point further north of this intersection if such extension is necessary to provide access to the portion of the Property proposed for such uses, as such four (4) lane divided section is depicted on the Concept Plan and in accordance with VDOT standards, together with deceleration, acceleration and turn lanes at the intersections with the roads that provide access to the land bays along Pacific Boulevard, as required by VDOT. In addition, traffic signals shall be provided at all of the intersections with roads that provide access to land bays along Pacific Boulevard, if warranted by VDOT. Warrant studies shall be submitted to VDOT and the County with the submission of the construction plans and profiles for such roads that provide access to the land bays along Pacific Boulevard. If the traffic signals are not warranted at the time of the initial construction of Pacific Boulevard in Transportation Phase 1B, then the obligation to provide such signals shall be deferred to the beginning of Transportation Phase 2A, if warranted by VDOT at that time.

b. Bicycle Trail – Pacific Boulevard: To the extent not located within the public right-of-way, dedicate a 14-foot wide on-site public access easement in the setback area along the west side of Pacific Boulevard, and construct a 10-foot wide bicycle trail on the Property within the public right-of-way and/or within such public access easement along the portion of Pacific Boulevard constructed pursuant to the preceding paragraph. This trail shall be located generally as shown on Sheets 15 and 16 of the Concept Plan.

c. Gloucester/Pacific Intersection: In the event signalization is not provided by others, the Owner shall install a traffic signal at the Gloucester/Pacific intersection, subject to review and approval of a traffic signal warrant study submitted to VDOT. The traffic signal and intersection layout shall be designed to VDOT standards and to accommodate the ultimate four-way intersection at such time as Gloucester Parkway is extended to the west. If the traffic signal is not warranted at the time of the construction of the portion of Pacific Boulevard identified in Transportation Phase 1B, then the obligation to provide such signal shall be deferred to the beginning of Transportation Phase 2A, if warranted by VDOT at that time.

4. Transportation Improvements for Transportation Phase 2A (up to and including 1,700,000 square feet of non-residential, non-hotel uses, 500 hotel rooms and 1,068 residential dwelling units). Prior to issuance of the zoning permit for the 1,100,001st square foot of non-residential, non-hotel uses, the 271st hotel room, or the 701st residential dwelling unit, whichever is first in time, and unless already constructed or installed by others, the Owner shall construct or bond for construction the following transportation improvements:

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a. Pacific Boulevard: Dedicate right-of-way for the ultimate configuration of this roadway as a four (4) lane divided road and construct Pacific Boulevard, except any portion already constructed or committed to be constructed by others, from its current terminus at the southern Property boundary across the Property, as a four (4) lane divided road northward, to the proposed intersection of Pacific Boulevard and Road 1 between Land Bays F and B, as illustrated on the Concept Plan and in accordance with VDOT standards, together with deceleration, acceleration and turn lanes at the intersections with the roads that provide access to the land bays along Pacific Boulevard, as required by VDOT. In addition, traffic signals shall be provided at all of the intersections with roads that provide access to land bays along Pacific Boulevard, if warranted by VDOT. Warrant studies shall be submitted to VDOT and the County with the submission of the construction plans and profiles for such roads that provide access to the land bays along Pacific Boulevard. If the traffic signals proffered in Proffer III.D.3.a. are still not warranted at the beginning of Transportation Phase 2A, then the obligation to provide such signals shall be deferred to the beginning of Transportation Phase 2B if warranted by VDOT at that time.

b. Bicycle Trail – Pacific Boulevard: To the extent not located within the public right-of-way, dedicate a 14-foot wide on-site public access easement in the setback area along the west side of Pacific Boulevard, and construct a 10-foot wide multi-purpose trail on the Property within the public right-of-way and/or within such public access easement along the portion of Pacific Boulevard constructed pursuant to the preceding paragraph. This trail shall be located generally as shown on Sheets 15 and 16 of the Concept Plan.

c. Gloucester/Pacific Intersection: In the event signalization is not provided by others or in prior phases of development, a traffic signal will be installed at the Gloucester/Pacific intersection, subject to review and approval of a traffic signal warrant study submitted to VDOT. The traffic signal and intersection layout will be designed to VDOT standards and to accommodate the ultimate four-way intersection at such time as Gloucester Parkway is extended to the west. If the traffic signal is not warranted at the beginning of Transportation Phase 2A, then the obligation to provide such signal shall be deferred to the beginning of Transportation Phase 2B if warranted by VDOT at that time.

5. Transportation Improvements for Transportation Phase 2B (up to and including 2,400,000 square feet of non-residential, non-hotel uses, 720 hotel rooms and 1,400 residential dwelling units). Prior to issuance of the zoning permit for the 1,700,001st square foot of non-

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residential, non-hotel uses, the 501st hotel room, or the 1,069th residential dwelling unit, whichever is first in time, and unless already constructed or installed by others, the Owner shall construct or bond for construction the following transportation improvements:

a. Pacific Boulevard: Dedicate right-of-way for the ultimate configuration of this roadway as a four (4) lane divided road and construct Pacific Boulevard, except any portion already constructed or committed to be constructed by others, from its then current northerly terminus across the Property within the Pacific Boulevard Envelope as shown on the Concept Plan, with a bridge across Broad Run, and, subject to right-of-way being provided by others, connecting to the eastern terminus of Russell Branch Parkway. Such road extension shall be a four (4) lane divided roadway and shall be constructed within the Pacific Boulevard Envelope as shown on the Concept Plan and in accordance with VDOT standards, together with deceleration, acceleration and turn lanes at the intersections with the roads that provide access to the land bays along Pacific Boulevard, as required by VDOT. In addition, traffic signals shall be provided at all of the intersections with roads that provide access to land bays along Pacific Boulevard, if warranted by VDOT. Warrant studies shall be submitted to VDOT and the County with the submission of the construction plans and profiles for such roads that provide access to the land bays along Pacific Boulevard. If the traffic signals are not warranted at the beginning of Transportation Phase 2B, then the obligation to provide such signals shall be deferred to the beginning of Transportation Phase 3, if warranted by VDOT at that time.

b. Bicycle Trail – Pacific Boulevard: To the extent not located within the public right-of-way, dedicate a 14-foot wide on-site public access easement in the setback area along the west side of Pacific Boulevard, and construct a 10-foot wide multi-purpose trail on the Property within the public right-of-way and/or within such public access easement along the portion of Pacific Boulevard constructed pursuant to the preceding paragraph. This trail shall be located generally as shown on Sheets 15 and 16 of the Concept Plan.

c. Gloucester/Pacific Intersection: In the event signalization is not provided by others or in prior phases of development, a traffic signal shall be installed at the Gloucester/Pacific intersection, subject to review and approval of a traffic signal warrant study submitted to VDOT. The traffic signal and intersection layout shall be designed to VDOT standards and to accommodate the ultimate four-way intersection at such time as Gloucester Parkway is extended to the west. If the traffic signal is not warranted at the beginning of Transportation Phase 2B, then the obligation

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to provide such signal shall be deferred to the beginning of Transportation Phase 3 if warranted by VDOT at that time.

6. Transportation Improvements for Transportation Phase 3 (full buildout). Prior to issuance of the zoning permit for the 2,400,001st square foot of non-residential uses, non-hotel uses and unless already constructed or installed by others, the Owner shall construct or bond for construction the following transportation improvements:

a. Gloucester Parkway: Dedicate right-of-way, if and as necessary, and construct an extension of Gloucester Parkway, except any portion already constructed or committed to be constructed by others, from Pacific Boulevard across the Property, with a bridge across Broad Run, as shown on the Concept Plan, and, subject to right-of-way being provided by others, connecting to Loudoun County Parkway. Such road extensions shall be four (4) lane divided roadways and shall be constructed, as illustrated on the Concept Plan and in accordance with VDOT standards, together with deceleration, acceleration and turn lanes as required by VDOT.

b. Bicycle Trail – Gloucester Parkway: To the extent not located within the public right-of-way, dedicate a 14-foot wide on-site public access easement in the setback area along the north side of Gloucester Parkway, and construct a 10-foot wide multi-purpose trail within the public right-of-way and/or within such public access easement and along the portion of Gloucester Parkway constructed pursuant to the preceding paragraph, which shall connect to the bicycle trail located on the west side of Pacific Boulevard.

c. Gloucester/Pacific Intersection: In the event signalization is not provided by others or in prior phases of development, a traffic signal shall be installed at this intersection, subject to review and approval of a traffic signal warrant study submitted to VDOT. The warrant study shall be submitted to VDOT and the County with the first final site plan submitted to the County for development in Transportation Phase 3.

E. Acquisition of Off-Site Right-of-Way/Easements.

1. In addition to dedicating right-of-way and easements on the Property, the Owner shall make a good faith effort to acquire off-site right-of-way or easements necessary for the construction of the off-site portions of Pacific Boulevard within the Pacific Boulevard Envelope and Gloucester Parkway proffered herein. Where, despite such good faith efforts, right-of-way and/or easements necessary for construction of such off-site portion of Pacific Boulevard within the Pacific Boulevard Envelope and/or Gloucester Parkway cannot be obtained either (i) voluntarily through donation or proffer to the County, or (ii) through purchase by the Owner

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at a fair market value price, the Owner shall request VDOT and/or the County to acquire such right-of-way and/or easements by appropriate eminent domain proceedings by VDOT and/or the County, with all costs associated with the eminent domain proceedings to be borne by the Owner, including but not limited to, land acquisition costs. The initiation of such eminent domain proceedings is solely within the discretion of VDOT and/or the County. It is understood that the County will attempt to obtain the off-site right-of-way for both the extension of Pacific Boulevard within the Pacific Boulevard Envelope and the extension of Gloucester Parkway, as a condition of County approvals of land use applications for the properties across which such extensions will be constructed. The Owner shall not be required to pay any amounts for such right-of-way to the extent the County obtains such right-of-way as a condition of County approvals of land use applications.

2. If the necessary right-of-way and/or easements cannot be acquired voluntarily and the County and/or VDOT choose not to exercise the right of eminent domain within six (6) months of a written request by the Owner, the Owner shall be released from the obligation to acquire such right-of-way. If the County and/or VDOT elect to defer its exercise of eminent domain, then the Owner's Proffer requiring such acquisition or construction shall likewise be deferred.

3. Notwithstanding the commitments in Proffer III.D. above, the Owner shall not be prevented from obtaining any land use approvals (including, without limitation, site plan, subdivision, construction plans and profiles, grading permit, zoning permit, building permit, and occupancy permit) for the Property, nor from commencing construction on the Property, during the pendency of any eminent domain proceedings initiated pursuant to this Proffer, nor any deferral of the County's and/or VDOT's exercise of eminent domain pursuant to Proffer III.E.2. above.

F. Traffic Signalization.

When required by the phasing provisions set forth in the paragraphs above, the Owner shall prepare a signal warrant analysis for the installation of the traffic signals identified in each respective Transportation Phase. Pursuant to said signal warrant analysis, and if warranted by VDOT, the Owner shall design and install traffic signalization at the respective intersections when required by the schedule above. In the event a signal has not been warranted by VDOT when the Owner desires to proceed with the respective phase of development on the Property, the obligation to design and install such signal shall be deferred to the beginning of the next phase of development on the Property. In the event a signal proffered above has not been warranted at the beginning of Transportation Phase 3 of development on the Property, the Owner shall make a cash contribution to the County for the cost of the design and installation of such traffic signal. Such cash contribution shall be made prior to issuance of the first zoning permit for a use in Transportation Phase 3 of the development. The amount of the cash contribution shall be based on an estimate provided to the County by a certified engineer; however, in no case shall the contribution exceed Two Hundred Seventy-Five Thousand and 00/100 Dollars

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(\$275,000.00) for each traffic signal. This maximum limit on said contribution shall escalate in accordance with the CPI from a base year of 2010 (see Proffer VIII.C.).

G. Cash Equivalent Contribution.

Unless otherwise provided in these Proffers or unless such improvements are provided in cooperation with others by private agreement or subject to the commitments of other zoning applications, the Owner agrees that, in the event any of the transportation improvements described above in Proffer III.D., except (i) the bridge crossings and off-site extensions of Gloucester Parkway and Pacific Boulevard, and (ii) the portions of Pacific Boulevard and Gloucester Parkway constructed by VDOT with the construction of the Route 28/Nokes Boulevard/Gloucester Parkway interchange, are constructed or bonded for construction by others prior to bonding for construction by the Owner, the Owner shall contribute to the County or its designee, for each such improvement provided by others, an amount equal to the cost of constructing such transportation improvements described above in Proffer III.D. in lieu of actual construction of each such improvement provided by others. For the purposes of determining the in-lieu-of contribution, (i) the actual cost of the respective improvements will be used if available; if not, the value of the bond estimate will be used, and (ii) construction costs shall be deemed to include all engineering, surveying, bonding, permit fees, utility relocation, and other hard costs of construction based on paid invoices. Such contribution in lieu of actual construction shall occur at the time the Owner would otherwise have been required by these Proffers to bond or construct such improvements. As determined by the County, such contribution shall either be used to reimburse the party who constructed such improvements, or for regional roadway or transit improvements in the vicinity of and for the benefit of the Property.

H. Highway Noise Mitigation.

Concurrently with the filing of the first site plan or construction plans and profiles for the Property, whichever is first in time, the Owner shall submit an acoustical analysis for the Property to determine which areas of the Property may be adversely impacted by highway noise generated along (i) the Route 28 (Sully Road)/Pacific Boulevard frontage, and (ii) the Gloucester Parkway frontage. Any such acoustical analysis shall be based upon the most recent traffic volumes and ultimate design speeds of Route 28, Pacific Boulevard and Gloucester Parkway, as made available by the Loudoun County Office of Transportation Services ("OTS"). With each subsequent site plan for development on the Property, the Owner shall demonstrate compliance with the aforementioned acoustical analysis with the goal of mitigating noise levels that exceed the Noise Abatement Criteria identified in the Countywide Transportation Plan in the noise sensitive areas of the Property. Compliance with the acoustical analysis shall demonstrate the methods that shall be incorporated into the site and building design in order to reduce noise levels that result in noise levels at least two (2) decibels less than the Noise Abatement Criteria identified in the Countywide Transportation Plan, with preference given to passive measures, such as landscaping and berming, to the extent practicable.

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I. Bus Shelters.

Within six (6) months of the date of commencement of public bus service to the Property, the Owner shall construct two (2) bus shelters on the Property along Pacific Boulevard. Said bus shelters shall be in addition to those required in accordance with SPEX 2008-0054. The Owner shall coordinate the design and location of these bus shelters with OTS or other appropriate County agency. The commitment in this Proffer to construct bus shelters shall terminate 20 years after issuance of the zoning permit for the Property, if no public bus service to the Property has been established during such 20 years; provided upon such termination, the Owner shall contribute to the County a cash contribution in the amount of the estimated cost of 2 bus shelters to be used by the County to construct such bus shelters in the future. The bus shelters shall be maintained by the Owners Association established pursuant to Proffer VII. The Owner shall coordinate the design and location of such bus shelters with OTS at the time of site plan review.

J. Transportation Demand Management Program.

Prior to issuance of the first zoning permit for an office or residential use on the Property, the Owner shall implement a Transportation Demand Management ("TDM") program whose objective is to reduce peak hour vehicle trips to and from the site. The means to achieve this objective over the build-out period for this site may vary from time to time as knowledge is gained about specific factors and as the area and region develop. Elements of this program shall include, but shall not necessarily be limited to, the following:

1. Identify an Employer Transportation Coordinator (ETC) for each employment or residential building to serve as the TDM contact with OTS. ETCs shall promote and encourage commuting alternatives in cooperation with other private and public TDM efforts or Transportation Management Associations. ETCs shall meet with OTS Staff to clarify commuting options to the site and develop promotions and programs in support of established TDM goals.

2. Conduct initial and biennial employee commute surveys of employees of employment buildings and residents of residential buildings to benchmark and measure progress toward the reduction of vehicle trips and vehicle emissions.

3. Provide a minimum of five percent (5%) of total parking spaces for each employment or residential building as preferred parking spaces for (a) carpool/vanpool vehicles, (b) fuel efficient vehicles, or (c) car sharing vehicles.

4. Promote flexible, compressed, or telework schedules for on-site employees and residents.

5. Support transit service by encouraging all employers to provide qualified transportation fringe benefits, as allowed under Section 132(f) of the Internal Revenue Code.

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6. Construct and maintain permanent public information displays in all employment or residential buildings for distribution of alternate commute information, including transit schedules, park-and-ride lot maps, rideshare programs and telework.

7. Install secure weather-protected bicycle storage facilities or bicycle racks for a minimum of 20 bicycles for each employment or residential building. Such bicycle storage facilities and/or bicycle racks shall be located in a convenient location for use by employees and/or residents and shall be installed prior to issuance of the occupancy permit for each respective building.

8. Provide accessible shower facilities in all employment buildings that are a minimum of 4 stories or 50 feet in height and containing greater than 100,000 square feet of non-residential uses.

9. Provide information on office employers' and residential buildings' intranet or internet sites detailing alternative modes of transportation and other travel reduction opportunities.

10. Submit to OTS biennial travel reduction plans outlining strategies for reducing vehicles trips to and from the Property during peak hours.

K. Transit Service Contribution.

At the time of issuance of each residential zoning permit for the Property, the Owner shall make a one-time cash contribution to the County in the amount of Five Hundred Seventy-Five and 00/100 Dollars (\$575.00) for each of the market rate dwelling units developed on the Property. Such contributions shall be used, in the discretion of the Board of Supervisors, to fund capital equipment for transit services that serve the Property. Said contributions shall be escalated in accordance with the changes in the CPI from a base year of 2010 (see Proffer VIII.C.).

L. Kincora Shuttle.

Upon issuance of zoning permits for greater than 1,500,000 square foot of non-residential, non-hotel uses (which threshold shall include the non-residential uses constructed on the PD-IP Portion) and if there is adequate demand as determined by OTS, the Owner shall provide a private shuttle service during regular business hours utilizing vehicles with a minimum capacity of 20 persons for the transport of employees and residents between the uses on the Property with the intent of connecting those non-residential uses located in Land Bays N and Q with the remaining uses on the Property and to destinations within the vicinity such as the Dulles Town Center. In addition, until such time as regional transit service is available to the site, the Applicant shall provide such shuttle service to the nearest park-and-ride facility or regional transit facility and to destinations within the vicinity such as the Dulles Town Center.

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IV. RECREATION AND HISTORIC

A. Recreation.

1. The Owner shall construct a bicycle and pedestrian circulation system consisting of sidewalks and trails on the Property in substantially the same location as illustrated on Sheets 15 and 16 of the Concept Plan. Sidewalks need not be constructed in locations where asphalt trails are constructed to provide the pedestrian circulation linkage depicted on Sheets 15 and 16 of the Concept Plan. Sidewalks shall be constructed on both sides of Roads 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12 as depicted on Sheet 16 of the Concept Plan and shall include conveyance of appropriate public access easements. Sidewalks and trails shall be constructed in phases concurrently with the development of land in areas adjacent to such sidewalks and trails. Unless constructed in the public right-of-way, sidewalks shall be subject to a public access easement of a minimum of 10 feet in width, asphalt trails shall be subject to a public access easement of a minimum of 14 feet in width, and all other trails shall be subject to a public access easement of a minimum of 12 feet in width. Trails constructed within the River and Stream Corridor Resource shall be constructed of pervious surfaces and with raised boardwalk crossings where such trails cross jurisdictional waters and/or wetlands as depicted in the section exhibits provided on Sheet 15 of the Concept Plan. Trails constructed outside of the River and Stream Corridor Resource shall be constructed of asphalt and/or such pervious surfaces, boardwalks and raised walkways as may be permitted, in accordance with the applicable provisions of the FSM. Unless a different minimum width is established for a specific trail elsewhere in these Proffers, asphalt trails shall be a minimum width of 10 feet. All other trails shall be a minimum width of eight (8) feet. Sidewalks shall be constructed of concrete, brick, concrete or brick pavers, marble or other material typically used for sidewalks in office parks and mixed-use centers, in accordance with the Design Guidelines and applicable provisions of the FSM, and shall be a minimum width of five (5) feet for private sidewalks in residential areas, a minimum width of six (6) feet for private sidewalks in commercial areas, and, subject to VDOT approval, a minimum width of five (5) feet for public sidewalks.

2. The Owner shall reserve at least 15 parking spaces near each trail head location as shown on the Concept Plan. Such spaces shall be provided with appropriate signage indicating that such spaces are reserved for use by recreational users.

3. As each portion of the Property receives record plat approval or site plan approval, whichever is first in time, the Owner shall develop and dedicate to the Owners Association provided in Proffer VII., the SWM/BMP ponds, the trails, civic spaces and open space areas identified in such portion, all as illustrated on the Concept Plan. The declaration of covenants, conditions and restrictions recorded against the Property (the "OA Covenants") shall require the establishment of maintenance procedures and sufficient funding so that the Owners Association will have the financial ability to maintain such facilities and open space areas in a decent, clean, safe and healthy condition for use by residents of the Property.

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B. Dedication of Floodplain Area and Trails.

Within six (6) months of the completion of all work associated with the construction, maintenance and certification by the Army Corps of Engineers and/or the Virginia Department of Environmental Quality, of any wetlands mitigation and/or wetlands mitigation banking areas the Owner develops in the Broad Run floodplain, the Owner shall dedicate to the County the approximately 162.11-acre area west of Pacific Boulevard within the major floodplain for Broad Run as shown on Sheets 34 and 35 of the Concept Plan the ("Kincora Broad Run Stream Valley Park"), at no charge, for use as a natural area for public passive park purposes. Prior to such dedication, all trails located west of Pacific Boulevard and within the major floodplain for Broad Run as depicted on the Concept Plan shall be subject to public access easements to permit use by the public and shall be maintained by the Owners Association. In the event the County desires dedication of the wetlands mitigation and/or wetlands mitigation banking areas prior to the certification by the Army Corps of Engineers and/or the Virginia Department of Environmental Quality, the Owner shall dedicate to the County such areas within six (6) months of a request by the County; provided the Owner retains (i) ownership of all wetlands mitigation banking credits and the County assumes responsibility for maintenance of such wetlands mitigation areas until such areas are certified as completed by the Army Corps of Engineers and/or the Virginia Department of Environmental Quality, and (ii) the right to use and maintain, as may be required by these Proffers, all trails in such dedication area.

C. Broad Run Toll House.

At such time as the Applicant is obligated under this Proffer Statement to construct the extension of Pacific Boulevard across Broad Run and connecting to Russell Branch Parkway, if (i) such extension of Pacific Boulevard will not permit the preservation of the Broad Run Toll House in its current location on Loudoun County GPIN Parcel 040-39-8734, and (ii) the Applicant determines, in consultation with the Virginia Department of Historic Resources, the Loudoun County Department of Parks, Recreation and Community Services, and the Loudoun County Historic District Review Committee, that it is feasible to relocate the Broad Run Toll House from its current location to a suitable location on the Property or another suitable location, the Applicant shall pursue the relocation of the Broad Run Toll House to such alternative location, at the Applicant's sole expense. Such relocation shall be subject to applicable provisions of Section 6-1902 of the Zoning Ordinance and in conformance with applicable state and federal requirements regarding the relocation of such resource, which shall include, at a minimum, the preparation of a historic building survey and commencement of proceedings in accordance with Section 106 of the National Historic Preservation Act of 1966, if deemed necessary, by a qualified professional.

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V.DESIGN

A. Design Guidelines and Architectural Review.

The Property shall be developed as a unified community consistent with the Design Guidelines dated January 4, 2010 and attached to this Proffer Statement as **Exhibit D**. The Design Guidelines depict the architecture, landscaping, plaza lighting, signage and open space design requirements for the Property and shall be made applicable to the Property through covenants recorded prior to the first site plan approval. The Owner shall require the Owners Association created pursuant to **Proffer VII**, to establish a Design Review Committee consisting of owners of all or portions of the Property, except for any portions of the Property dedicated to the County for public use. The Design Review Committee shall develop appropriate review procedures to ensure the Property is developed consistent with the Design Guidelines. The Owners Association shall establish the Design Review Committee within three (3) months of the creation of the Owners Association, and all subsequent site and building plans shall be reviewed by the Design Review Committee for consistency with the Design Guidelines.

Prior to creation of the Design Review Committee, consistency with the Design Guidelines will be enforced by Loudoun County and/or the Owner. Subsequent to creation of the Design Review Committee, a letter confirming Design Review Committee approval shall be included with all building permit plan applications submitted to Loudoun County for the Property.

B. Boulevard Entrances.

Road 1 and Road 2, as identified on the Concept Plan, shall be designed and constructed, with landscaped medians eight (8) feet in width, to provide attractive boulevard entrances consistent with the cross-section shown on Sheet 18 of the Concept Plan; provided such landscaping in the medians shall not obstruct necessary sight distances for traffic nor violate the clear zone requirements for Pacific Boulevard. A project identification feature comparable in size and quality to the design shown on Sheet 21 of the Concept Plan shall be provided at the entrance from Pacific Boulevard in the southeast corner of Land Bay J identified on Sheet 11 of the Concept Plan.

C. Alleys.

Site plans shall depict the location of alleys that provide access to the interior of each land bay.

D. Demonstration of Square Footage Compliance.

With the filing of each site plan, the Owner shall provide a running tabulation which presents proposed and approved square footage as follows: (i) total overall site development within Kincora; (ii) total non-residential use by category proposed and residual amount available;

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(iii) total number of hotel rooms proposed and constructed; (iv) total non-residential use versus residential use; and (v) total amount of civic space. Such tabulation shall demonstrate compliance with the square footage limitations set forth in these Proffers and with the tabulation provided on Sheet 13 of the Concept Plan.

E. Screening of Internal Surface Parking Areas.

Surface parking areas shall be screened from the internal private streets with landscaping and walls and/or other streetscape elements as shown on Sheets 17 and 18 of the Concept Plan and comparable in size and quality to the examples provided on Sheets 19 and 19A of the Concept Plan and in Exhibit G, for the purpose of buffering headlight glare and other visual impacts of surface parking.

F. Structured Parking.

At full build-out, at least 50% of the required parking spaces will be located within parking structures. Parking structures that may be visible from public view shall be treated with individual design elements that may include, but not be limited to, storefront appearance, false fenestration, glass, colored or stamped concrete panels, or any combination thereof, or other architectural treatment for the purpose of blending the parking structure architecture with that of surrounding buildings. In the event that areas planned for structured parking are used as surface parking areas prior to full build-out, those surface parking shall be screened as indicated in Proffer V.E. above. At full build-out, parking structures fronting on Roads 2 and 6 as identified on the Concept Plan will include architectural treatment and/or liner buildings to enhance the facade as viewed from such roads.

G. Loading Docks/Dumpster Pads.

All refuse collection and loading areas on the Property shall be oriented so as to have minimum visibility from roads and residential uses. If such refuse collection and loading areas are not substantially blocked from view from roads and residential uses, they shall be treated with architectural elements similar to the principal structure, decorative fencing and/or landscaping so as to be screened from roads and residential uses.

H. Rooftop Mechanical Units.

Any mechanical units placed on the rooftops of buildings on the Property shall be screened by architectural features compatible with building facade architecture. Rooftop amenities such as garden terraces or recreational courts may also screen rooftop equipment.

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I. Building Entrances.

Unless deemed unfeasible in order to comply with federal security guidelines, each building constructed on the Property shall be constructed with its principal entrance oriented towards the street on which it fronts.

Pedestrian access shall be provided from parking areas to the principle entrances of all buildings constructed on the Property. The Owner shall ensure that each building can be accessed from adjacent parking areas via a demarcated pedestrian pathway.

J. Streets, Streetscaping and Landscaping.

1. Street Design. Streets will generally be designed and constructed in a rectilinear pattern of collector roads, local access roads, streets, and alleys, with streets generally terminating in other roads and streets. All private streets, sidewalks and trails shall be consistent with the typical road sections provided on Sheets 17 and 18 of the Concept Plan; provided the Owner reserves the right to apply for and obtain approval of any waivers permitted by the Zoning Ordinance or the FSM as long as development of uses with such waivers are in substantial conformance with the Proffers. There shall be no more than two (2) curb cuts for vehicular entrances on each side of Road 2 and no more than one (1) curb cut for vehicular traffic on each side of Road 6 and Road 8. There shall be no curb cuts for vehicular traffic on either side of Road 9.

2. Street Trees. Street trees on the Property will be planted in accordance with County criteria or as modified by these Proffers, and the Owner shall utilize, to the maximum extent feasible, trees that develop an overhead leaf canopy along the streets.

3. Private Streets. As modified by these Proffers, all private streets developed on the Property shall be owned and maintained by the Owners Association with appropriate covenants, restrictions and assessments. Private streets shall be subject to County review and approval at the time of applicable subdivision and site plan approvals, and shall be designed and constructed in accordance with the standards of the FSM applicable at the time such private streets are submitted to the County for approval. Private streets shall be designed to be comparable in scale to buildings to which they relate so that they contribute to the sense of a well designed neighborhood.

4. Streetscape Plan. The Owner shall submit a streetscape plan for each land bay with the initial site plan submission in each respective land bay. The streetscape plans will conform with County requirements, but shall include (i) all landscape buffer plans for all buffer areas and (ii) deciduous tree plantings (2 1/2" - 3.0" caliper) at an average of 44 feet on center where on-street parking is provided and 35 feet on center where on-street parking is not provided. These trees may be clustered where appropriate. Landscaping along the public streets shall be provided at the time each lot along the street is developed and may be supplemented with landscaping in addition to what is required by the Zoning Ordinance, at the Owner's option.

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5. Landscaping. Individual building and parking areas on the Property shall be landscaped in a manner that is coordinated, as to plant material, with the streetscape plan along the public streets. The landscaping within the parking areas will consist, primarily, of trees which provide shade or are capable of providing shade at maturity.

6. On-Street Parking. The Owner may provide some of the off-street parking spaces required by the Zoning Ordinance as on-street parking spaces within 400 feet of the subject principal use as permitted by the Zoning Ordinance. All on-street parking spaces shall be provided in accordance with the Zoning Ordinance and applicable VDOT and County standards.

7. Block Sizes. Any block longer than 400 feet shall contain a mid-block break, such as a plaza, pocket park, tot lot, village green, eating/picnic area, seating area, substantial hotel entrance plaza, or other outdoor gathering space.

K. Lighting.

Lighting on the Property shall be designed and constructed to minimize light trespass, specifically:

1. Spillover light onto adjacent properties shall not exceed one quarter foot-candle.
2. All exterior light fixtures shall be "full cut-off outdoor lighting fixtures" as defined by the Illuminating Engineering Society of North America (IESNA). Light shall be directed inward and downward toward the interior of the Property, away from public streets (except street lights) and the nearby residential properties.
3. Except for street and parking lot lights installed in accordance with applicable provisions of the FSM, the maximum height of any freestanding exterior lighting fixtures shall be 18 feet. Height shall be measured from the ground surface to the bottom of the lighting fixture.

L. Specific Land Bay Design Obligations.

1. Building Setbacks. Buildings shall be located with a maximum front yard set back of 25 feet from the adjacent road, as measured from the front of the curb for Roads 1, 3, 4, 5, 7, 10, 11 and 12 as identified on the Concept Plan. Buildings shall be located with a maximum front yard setback of 20 feet, as measured from the front of curb for Roads 2, 6, 8 and 9. This setback requirement shall not apply where buildings front along sidewalk cafes, outdoor plazas, courtyards, terraces, hotel entrances/plazas and other useable civic or open space.

Buildings in Land Bays B, F, J and N fronting on Route 28 or Pacific Boulevard shall be set back a minimum of 50 feet and a maximum of 150 feet from the edge of the Route 28 or Pacific Boulevard right-of-way line. Buildings within Land Bay Q shall be set back a minimum of 50 feet and a maximum of 620 feet from Route 28 or Pacific Boulevard. Surface parking

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located between Route 28 or Pacific Boulevard and any buildings located adjacent to Route 28 or Pacific Boulevard, respectively, shall be limited to no more than one (1) travel aisle and one (1) row of parking. Such surface parking shall be screened from Route 28 and Pacific Boulevard with landscaping and a berm comparable in size and quality to the Typical Pacific Boulevard Section identified on Sheet 18 of the Concept Plan.

2. Residential Open Space Amenities. Each building containing residential uses shall be located within 300 feet of an open space area at least 2,500 square feet in size. The distance shall be measured from the point on the building closest to such open space area. Open space areas may include tot lots and pocket parks. Tot lots shall be a minimum of 5,000 square feet in size and shall contain commercial grade equipment.

3. Residential Uses in Land Bay F. Any residential uses located in Land Bay F shall only be located within 250 feet of the Road 8 frontage of Land Bay F.

4. Retail Sales Establishments. Retail sales establishments located within multi-story office buildings that front on Pacific Boulevard or Route 28 shall be oriented away from such public roads. No retail sales establishments shall be oriented toward Route 28.

5. No Freestanding Non-Hotel Commercial Uses in Land Bay Q or Land Bay N. There shall be no freestanding non-hotel commercial uses in Land Bay Q or Land Bay N.

6. Screening of Interchange. The Property shall be screened from the Route 28/Nokes Boulevard Interchange with landscaping and a berm along the perimeter of the interchange, a minimum of two and one-half (2 1/2) feet in height and comparable in size and quality to the Typical Pacific Boulevard Section identified on Sheet 18 of the Concept Plan.

7. Terminus of Road 8 and Road 9. At full build-out of the Property, buildings shall be constructed opposite the southern terminus of Road 8 (in Land Bay H) and the northern terminus of Road 9 (in Land Bay E) as illustrated on Sheet 30 of the Concept Plan.

M. Universal Design.

Residential dwelling units provided in accordance with Proffers I.D. and I.E. shall employ universal design principles to the extent feasible and in accordance with funding requirements of any state, local or federal program governing such units.

VI. EMERGENCY SERVICES

A. Fire and Rescue Site.

If within two (2) years of the approval of this rezoning application ZMAP 2008-0021, the County awards construction of a fire and rescue and/or sheriff substation facility on the Property pursuant to the pending Public-Private Education and Infrastructure Act process for the Dulles

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Rt. 7/28 Area Fire & Rescue Station, then within sixty (60) days of the date such award is made, the Owner shall dedicate and convey to the Board of Supervisors a minimum of five (5) buildable (i.e., non-floodplain, non-wetlands, non-very steep slopes) acres located in Land Bay N, as identified on Sheets 9 and 10 of the Concept Plan as "Public Use Site," to be used for a County fire and rescue and/or sheriff substation facility, which shall include an area sufficient for the installation of a recycling drop off center. In the event such award is made within two (2) years of the approval of this rezoning application, the Owner shall (i) permit construction of a temporary access road across Land Bay N to such five-acre site until such time as access is available from Pacific Boulevard, (ii) construct street access and sidewalks to the site, and (iii) extend sewer, water, telephone, natural gas and electric service to the perimeter of the site, all concurrent with the Owner's own development activities on the portion of the Property abutting the site. The Owner shall not use such five (5) acre site for staging, dumping or similar activities prior to dedication of the site to the County pursuant to this Proffer. Such five (5) acre site shall not be subject to the covenants established for Kincora pursuant to Proffer V.A. However, the site plan and building plans for any fire and rescue and/or sheriff substation on such five (5) acre site shall be provided for review and comment to the Design Review Committee identified in Proffer V.A. prior to final approval by the County.

B. Owner's Contribution.

At the time of the issuance of each zoning permit, the Owner shall make a one-time contribution of Ten Cents (\$0.10) per gross square foot of non-residential floor area and Two Hundred Fifty and 00/100 Dollars (\$250.00) per market rate residential dwelling unit, which shall be payable to the County for distribution by the County to the primary volunteer fire and rescue companies providing service to the Property. Such contribution shall be adjusted annually in accordance with changes to the CPI, beginning from a base year of 1988 (see Proffer VIII.C.). Contributions pursuant to this paragraph shall be divided equally between the primary servicing fire and rescue companies providing fire and rescue services to the Property. Notwithstanding the foregoing, at such time as the primary fire and rescue services to the Property are no longer provided by incorporated volunteer companies, the obligation to make the contributions listed within this paragraph shall cease, or be reduced by half if only one service is no longer provided by an incorporated volunteer company. The intent of these provisions is to support a volunteer fire and rescue system so long as it is the primary provider of fire and rescue services to the Property.

C. Sprinkler Systems.

The Owner shall require all builders to provide sprinkler systems as required by applicable building codes for each use of the Property. The Owner shall install adequate infrastructure to ensure adequate water flow and pressure for such sprinkler systems.

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D. Fire & Rescue Review of Site Plans.

In conjunction with the initial submittal of each site plan, the Applicant shall also submit such site plan to Fire, Rescue and Emergency Management Planning for review and approval to ensure that the site layout provides emergency vehicles and personnel adequate access and circulation throughout the Property.

E. Emergency Access.

All buildings and parking structures shall be designed to permit adequate access and circulation of emergency personnel and vehicles.

VII. OWNERS ASSOCIATION

The Owner shall establish an Owners Association for the entire Kincora community, prior to approval of the first record subdivision plat or site plan on the Property, whichever is first in time. Membership in the Owners Association shall be required of owners of all commercial lots and residential units on the Property. The Owners Association shall have among its duties trash collection and maintenance of each of the common area amenities specified herein, including, without limitation, private streets/alleys, private parking areas, stormwater management facilities, common areas and open space, trash removal, recycling services, snow removal, private sidewalks and trails and private roads, and all responsibilities and duties specifically assigned to the Owners Association in this Proffer Statement. Nothing herein shall preclude the Owner from incorporating the PD-IP Portion into the Owners Association and/or establishing separate, sub-associations for any individual sections or land bays within the Property, with such sub-associations assuming responsibility for maintenance and other responsibilities within those individual sections or land bays; provided such separate, sub-associations shall not relieve the owners of units in the applicable sections of the Property from membership in the Owners Association for the entire Kincora community. Owners Association documents for the Property shall be submitted for review and approval by the County prior to the approval of the first application for record subdivision plat or site plan, whichever is first in time.

VIII. MISCELLANEOUS

A. Existing Wells and Drainfields.

The Owner shall abandon all existing wells and septic systems located on the Property in accordance with applicable law.

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B. Preliminary Soils Review.

The Owner shall prepare and submit a Preliminary Soils Review of the entire Property prior to submission to the County of the first preliminary plat, construction plans and profiles or site plan, whichever is first in time, for any section of the Property.

C. Annual Escalation.

Whenever these Proffers refer to the escalation of a proffered contribution or value in accordance with the Consumer Price Index (CPI-U) All Urban Consumers, Washington-DC-MD-VA-WV ("CPI"), unless otherwise expressly stated herein, such reference shall mean that the contribution or value shall escalate annually, beginning on January 1, 2011, and continuing each January 1 thereafter, by an amount equal to the percentage increase in the CPI over the prior year. If the U.S. Department of Labor shall ever cease publishing the CPI, the CPI, for purposes of these Proffers, shall be that index published by the Department of Labor or other U.S. government agency intended to reflect general increases in the cost of living for residents in the Washington, D.C. Standard Metropolitan Statistical Area.

D. Severability.

The Owner reserves the right to file and have accepted for review a proffered condition amendment, zoning concept plan amendment, rezoning, commission permit, zoning modification, special exception, variance or other zoning application for any portion of the Property, without having to obtain the joinder and/or consent of the owners of the other portions of the Property for which the zoning and land use approvals are not impacted by such application, provided that such application complies with the applicable submission requirements and Zoning Ordinance provisions.

E. Binding Effects.

The Owner warrants that the Owner owns all interests in the Property; that the Owner has full authority to bind the Property to these conditions; that the officer and/or manager of the Owner signing these Proffers is authorized to act on behalf of the Owner; and that these Proffers are entered into voluntarily; and that no signature from any third party is necessary for these Proffers to be binding and enforceable in accordance with their terms.

[SIGNATURES ON FOLLOWING PAGE]

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NA DULLES REAL ESTATE INVESTOR LLC,
a Delaware limited liability company

By: _____
Name: _____
Title: _____

COMMONWEALTH OF VIRGINIA
CITY/COUNTY OF _____, to-wit:

Before the undersigned, a Notary Public in and for the aforementioned jurisdiction, personally appeared _____, as _____ of NA Dulles Real Estate Investor LLC, who acknowledged that he executed the foregoing Proffers with the full power and authority to do so, as the act of such company.

IN WITNESS WHEREOF, I have affixed my hand and seal this ____ day of _____, 2010.

Notary Public

My Commission Expires: _____

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EXHIBIT A
CONCEPT PLAN

October 2008
July 21, 2009
October 2, 2009
January 8, 2010

EXHIBIT B
**ZONING ORDINANCE ("ZO"), FACILITIES
STANDARDS MANUAL ("FSM") AND LAND
SUBDIVISION & DEVELOPMENT ORDINANCE
("LSDO")**
MODIFICATIONS

January 13, 2010

ZONING ORDINANCE MODIFICATIONS

- A. Section 4-1356(B)(1)—Front Yard.** The Revised 1993 Loudoun County Zoning Ordinance requires that the maximum front yard in the PD-MUB District not exceed 30 feet, though a maximum front yard of 50 feet may be permitted when a courtyard, plaza, terrace, or other common area a minimum of 300 square feet is provided adjacent to the front property line.

This maximum area will be provided for uses within all Land Bays with the exception of Land Bays B, F, J, N and Q. Because of the constrained physical layout of this Land Bay, a maximum front yard of 150 feet adjacent to Pacific Boulevard may be necessary for Land Bays B, F, J and N. A maximum front yard of 620 feet is requested for Land Bay N, which is necessary to allow the construction of an office complex in conformance with federal security guidelines. Considering the isolated application of this modification request as well as the lower elevation and proposed landscaping within the buffer area between the buildings and Pacific Boulevard, the Applicant does not believe that it will detract from the intent of the PD-MUB District.

- B. Section 4-1356(B)(3)—Rear Yard.** The Revised 1993 Loudoun County Zoning Ordinance requires that the minimum rear yard in the PD-MUB District be at least 5 feet.

The Applicant requests that rear yards of 0 feet be permitted, which is necessitated by the grid network design of streets and blocks that places buildings closer together. Regardless of this requested modification, the Applicant will ensure that necessary fire provisions are incorporated into all designs of buildings which will be verified during site plan review.

- C. Section 4-1356(C)—Building Height.** The Revised 1993 Loudoun County Zoning Ordinance permits maximum building heights of 75 feet in the PD-MUB District.

In order to fulfill the recommendations of the Revised General Plan to provide prominent buildings adjacent to Route 28, the Applicant requests that a maximum building height of 160 feet be permitted for buildings located along Pacific Boulevard and Route 28 within Land Bays B, F, J and Q. This modification will permit the construction of taller buildings fronting Pacific Boulevard and Route 28, which implements a major goal of the keynote employment district.

- D. Section 4-1358(B)(2), Section 5-1413(C)(1)(a) & Section 5-1413(C)(2)(a)—Parking Lot Landscaping.** The Revised 1993 Loudoun County Zoning Ordinance requires that a 10-foot wide landscape strip be provided between parking lots and property boundaries.

The Applicant requests that this be modified to permit landscaping strips that will be a minimum of 4 feet, which is adequate to support vegetation growth and afford sufficient screening of parking areas. As depicted on Sheet 17 of the Concept Plan, a minimum planting area of 4 feet will be provided adjacent to surface parking areas, which will be planted with an evergreen hedgerow that will sufficiently shield pedestrians from parking lot glare impacts. Additionally, the pedestrian walkway adjacent to the hedgerow will be buffered from the adjacent travelway by a tree planting zone with a minimum width of 6 feet. The proposed streetscape will effectively shield surface parking areas from vehicular travelways and pedestrian pathways, which is the intent of Section 4-1358(B)(2), Section 5-1413(C)(1)(a) and Section 5-1413(C)(2)(a).

- E. Section 4-1358(C)—Tree Spacing.** The Revised 1993 Loudoun County Zoning Ordinance requires that street trees be provided adjacent to all areas dedicated for vehicle usage at a density of one tree per 25 linear feet.

The Applicant proposes that this requirement be modified to permit the calculation of required street trees to be calculated, and planted, 44 feet on-center where on-street parking is provided and 35 feet on-center where on-street parking is not provided. It is the past experience of the Applicant and its consultants that trees planted according to the requested spacing is sufficient to support healthy vegetative growth. The Zoning Ordinance requirement to provide street trees at a density of one tree per 25 linear feet is not conducive to an attractive, useful and healthy streetscape, as this measurement does not take into account restrictive planting areas such as utility corridors, sight distance and clear zone requirements, signage, lighting and streetscape amenities. The Applicant's modification, which has been approved on other similar projects in the County, takes these restrictive planting areas into account and aides in the creation in a safe and effective streetscape environment. As depicted on Sheet 18A of the Concept Plan, an emended soil panel will be provided behind the curb to interconnect tree pits, which will create a healthy environment for long-term tree growth.

- F. Section 4-1359(D)(2)—Private Streets.** The Revised 1993 Loudoun County Zoning Ordinance permits the provision of private streets if residential uses are located within 1,200 feet of principal business uses and that 75% of the structures are multi-story mixed use structures.

Each of the residential uses will be located within 1,200 feet of a principal business use structure. Greater than 50% of buildings will be multi-story mixed-use structures, though not the 75% required by this Section. The Applicant believes that the proposed development meets the intent of the PD-MUB District and that this development will be best served by private rather than public streets within the core of the development. An Owners Association will be created prior to the initial record plat approval that will be responsible for maintenance of the private streets.

FACILITIES STANDARDS MANUAL ("FSM") MODIFICATIONS

- A. Section 4.310(C)--General Design Requirements.** The FSM requires that road jogs with center lines offsets of less than 225 feet shall not be allowed in public and Category A private roadways.

The Applicant proposes that private streets within village portion of Kincora will be constructed with centerline offsets of a minimum of 90 feet, which is necessary to permit the type of street grid network including streetscapes that will promote pedestrian safety along these internal roads.

- B. Section 4.310(G)--General Design Requirements.** The FSM requires that roadways intersecting with a public or Category A private roadway shall have a minimum length of 50 feet between curb returns and/or curb cuts.

The Applicant proposes that the village portion of Kincora will be constructed with private streets that will have a minimum of 0' between curb returns and/or curb cuts, which is necessary to permit the type of street network that will promote, and provide protection, for pedestrian activity along these internal private streets.

- C. Section 4.330(B)(2)--Private Roadway Standards.** The FSM requires that Category A roadways shall be constructed with cross section easements that are a minimum of 6' behind the face of curb.

The Applicant proposes that the cross section easements for Category A roadways within the village portion of Kincora be permitted to be constructed with cross sections that will be a minimum of 0.5' feet behind the face of curb, which is necessary to permit the type of street network and design necessary to promote pedestrian usability while still ensuring vehicular and pedestrian safety.

- D. Section 4.330(B)(3)--Private Roadway Standards.** The FSM requires that i) Category A1, A2, A3, A4 and A5 roadways be designed with a minimum curve radius of 110, 165, 338 and 478 feet, respectively; ii) Category A2, A3, A4 and A5 roadways be designed with speeds of 25, 30 and 35 miles per hour, respectively; and iii) Category A1, A2, A3, A4 and A5 roadways be designed with sight distances of 150, 200 and 275, feet respectively.

The FSM requires that i) Category A1, A2, A3, A4 and A5 roadways be designed with a minimum curve radius of 110, 165, 338 and 478 feet, respectively – the Applicant requests that these curve radii be reduced to 50 feet; that ii) Category A2, A3, A4 and A5 roadways be designed with speeds of 25, 30 and 35 miles per hour, respectively – the Applicant requests that these design speeds be reduced to 20 miles per hour; and that iii) Category A1, A2, A3, A4 and A5 roadways be designed with sight distances of 150, 200 and 275, feet respectively – the Applicant requests that these sight distance requirements be reduced to 100 feet. The private roads within the village portion of Kincora will provide adequate vehicular circulation and promote a safe and attractive pedestrian friendly environment.

LAND SUBDIVISION AND DEVELOPMENT ORDINANCE ("LSDO")

- A. **Section 1245.01(2)—Lots and Building Area.** The LSDO requires that all lots shall front on an existing or recorded public street dedicated by the subdivision plat and maintained or designed and built to be maintained by the Virginia Department of Transportation.

In accordance with Section 4-1359(D)2 of the Revised 1993 Loudoun County Zoning Ordinance, which permits the construction of private streets within the PD-MUB District, the village portion of Kincora will be developed with lots that will front on private streets constructed in accordance with applicable requirements of the FSM unless modified according to the conditions stated in the Proffers for this rezoning. All of the private streets will be maintained by the Owner's Association that will be created prior to occupancy of any of the buildings within the development.

JUSTIFICATION

The 336.64-acre subject property (the "Property") is located in the southwest quadrant of the intersection of Route 7 and Route 28, with Broad Run forming the western boundary. The Property is strategically sited at the crossroads of major transportation thoroughfares, both existing and proposed. The location, size and environmental features of the Property provide a unique setting for an attractive mixed-use business community that will contribute significantly toward the County's economic development and tax base expansion goals.

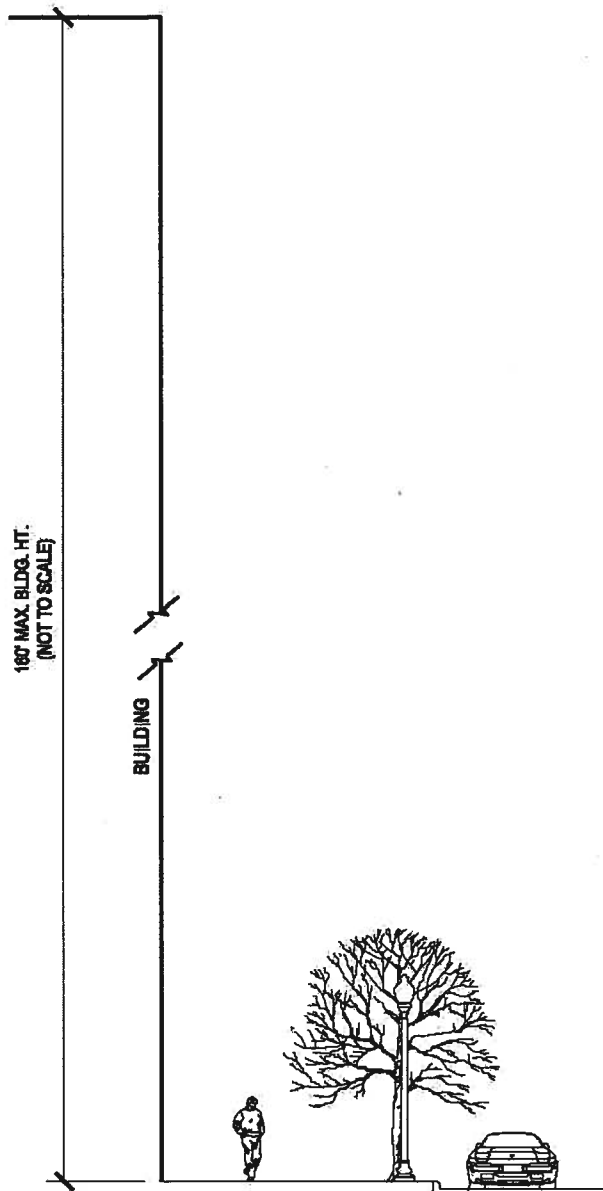
Approximately 160 acres of the Property are within the 100-year floodplain associated with Broad Run. This natural feature provides exciting recreational opportunities as well as challenging design constraints. The County's keynote employment objectives, the Property's environmental resources and the two key regional road links that cross the Property - Gloucester Parkway and Pacific Boulevard - all guided the vision for Kincora. Kincora has been designed with taller keynote office buildings along the Route 28 corridor, with a suburban-scale village center nestled between the office buildings and the expansive Broad Run floodplain. The village center will be attractive and walkable, with a variety of uses and amenities that create a distinct sense of place to support the keynote office buildings along Route 28.

To achieve this vision for Kincora, certain modifications of the requirements of the Revised 1993 Loudoun County Zoning Ordinance (the "Zoning Ordinance"), Facilities Standards Manual ("FSM") and Loudoun County Subdivision and Development Ordinance ("LSDO") are necessary. These modifications will permit development of Kincora as a vertically-integrated and pedestrian-friendly, mixed-use business community that would not be possible if the site were developed in strict conformance with these provisions of the Zoning Ordinance, FSM and LSDO.

The requested Zoning Ordinance modifications pertain to an increase in front yard and a decrease in rear yard setbacks, an increase in building height, provision of private parking lot landscaping and tree spacing requirements. The designation of the Property for "keynote employment" in the Revised General Plan seeks to locate prominent office buildings of significant height adjacent to Route 28. To achieve this vision, it is necessary to modify the maximum and minimum front and rear yard setbacks, respectively, and increase the maximum

building height of the PD-MUB District to permit such an increase in building height in the portion of the Property along Route 28. Neither modifying the front or rear yard setbacks or increasing the building height will adversely affect neighboring properties. These modifications will permit a development program that will enhance this segment of the Route 28 Corridor in furtherance of the goals of the Revised General Plan. Modifications of the parking lot landscaping and tree spacing requirements are necessary to permit the streetscape scheme described in the Proffers and depicted on the Concept Plan. These modifications will provide sufficient separation between parking areas and the space necessary to promote healthy growth of street trees and plantings.

Certain modifications of private street requirements of the FSM and the LSDO are necessary to permit the private road network in the village center portion of Kincora. These FSM and LSDO modifications will allow the street grid network necessary to support the type of compact, mixed-use business community development shown on the Concept Plan. The design of the private street network for Kincora is create a pedestrian-friendly atmosphere with street trees, multiple curb cuts, shorter curve radii and slower speeds on the private streets. In addition, the Owners Association will be responsible for maintenance of all private streets at Kincora.



	APPLICABLE LANDBAYS	NON-APPLICABLE LANDBAYS
A		X
B	X	
C		X
D		X
E		X
F	X	
G		X
H		X
J	X	
K		X
N		X
Q	X	

A

ZO Section 4-1356(C)

N.T.S.

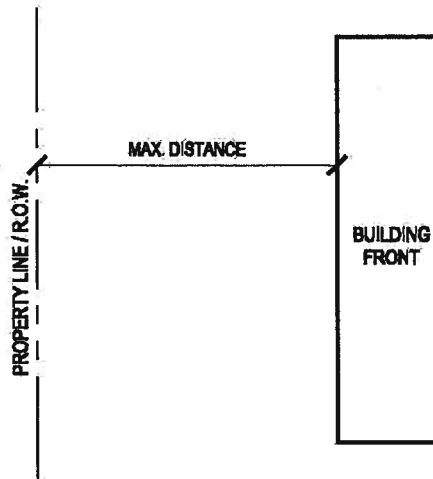
ZONING MODIFICATIONS

KINCORA VILLAGE

Loudoun County, Virginia

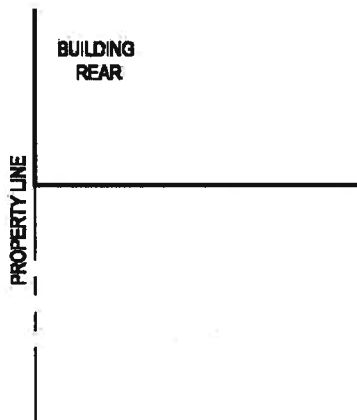
January 11, 2010





APPLICABLE LANDBAYS	150' MAX. DISTANCE	620' MAX. DISTANCE
B	X	
F	X	
J	X	
N	X	
Q		X

(B) **ZO Section 4-1356(B)1**
N.T.S.



(C) **ZO Section 4-1356(B)3**
N.T.S.

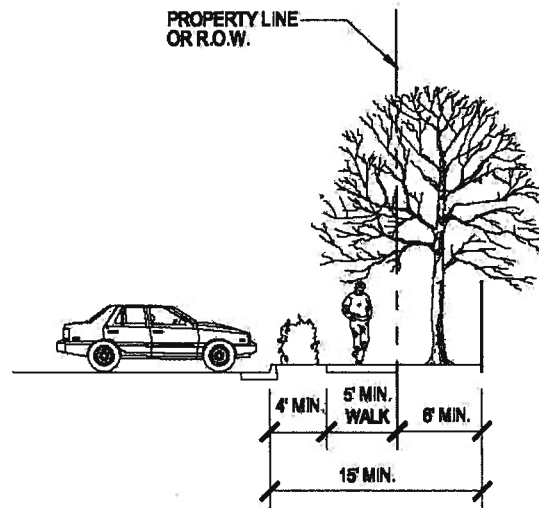
ZONING MODIFICATIONS

KINCORA VILLAGE

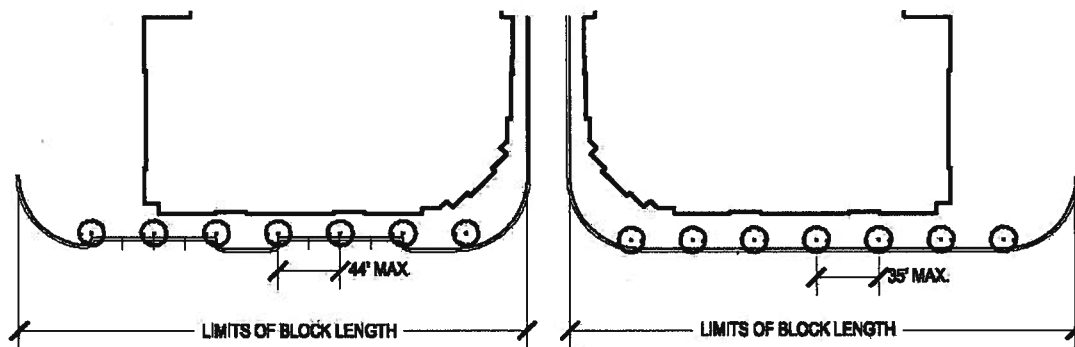
Loudoun County, Virginia

January 11, 2010





D **ZO Section 4-1358(B)2**
N.T.S.



E **ZO Section 4-1358(C)**
N.T.S.

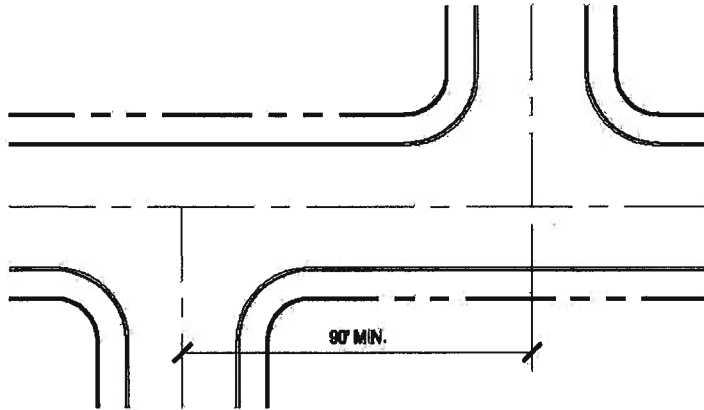
ZONING MODIFICATIONS

KINCORA VILLAGE

Loudoun County, Virginia

January 11, 2010

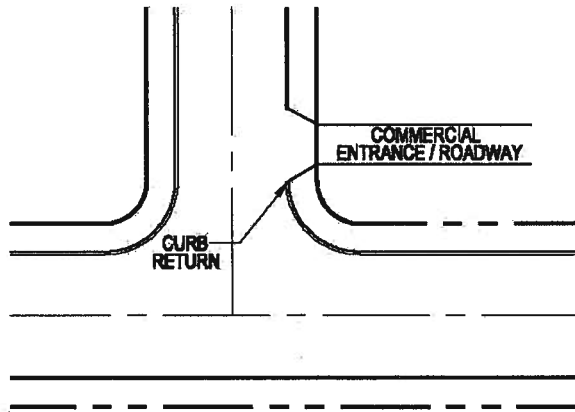




F

FSM Section 4.310(C)

N.T.S.



G

FSM Section 4.310(G)

N.T.S.

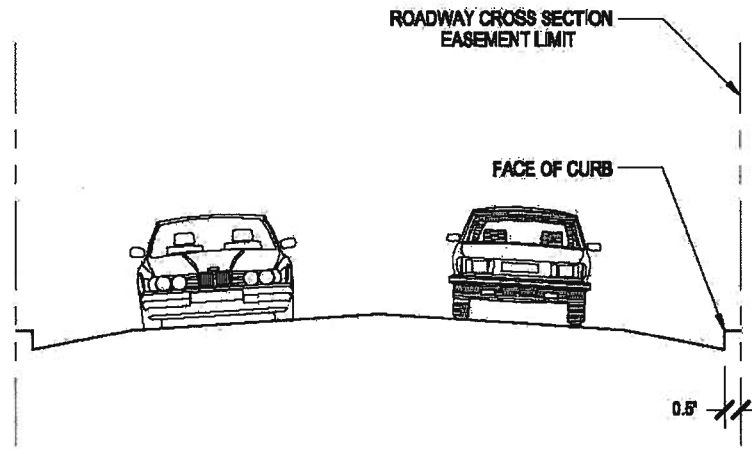
ZONING MODIFICATIONS

KINCORA VILLAGE

Loudoun County, Virginia

January 11, 2010

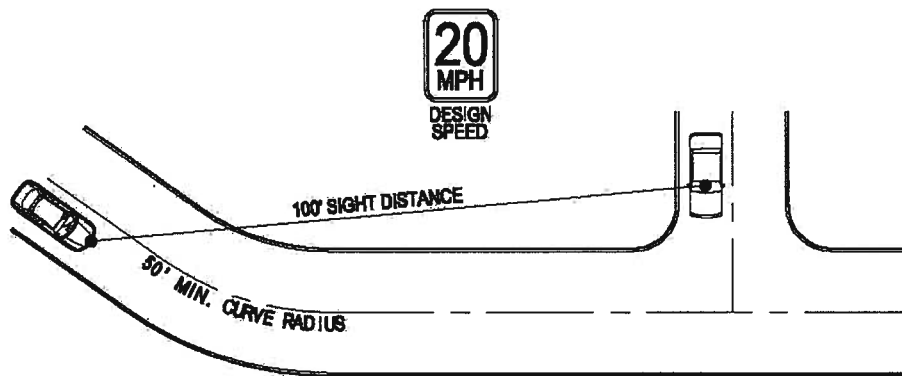




H

FSM Section 4.330(B)(2)

N.T.S.



I

FSM Section 4.330(B)(3)

N.T.S.

ZONING MODIFICATIONS

KINCORA VILLAGE

Loudoun County, Virginia

January 11, 2010



EXHIBIT C
AMENDED DEED OF OPEN SPACE EASEMENT

January 13, 2010

Document prepared by
and after recording return to:

DRAFT: January 13, 2010

Hunton & Williams LLP
1751 Pinnacle Drive, Suite 1700
McLean, Virginia 22102
Attn: John C. McGranahan, Jr., Esquire
Tax Map Parcel: 042-49-0209

AMENDED DEED OF OPEN SPACE EASEMENT

THIS AMENDED DEED OF OPEN SPACE EASEMENT (this "Amendment"), dated as of _____, 2007, by and between **NA DULLES REAL ESTATE INVESTOR LLC**, a Delaware limited liability company (the "Owner"), as grantor and grantee for indexing purposes, and **BOARD OF SUPERVISORS OF LOUDOUN COUNTY, VIRGINIA**, a body corporate and politic (the "Board"), as grantor and grantee for indexing purposes, recites and provides:

RECITALS

The Owner is the owner of that certain property in the Broad Run Election District of Loudoun County, Virginia described as Lot 2 of the Beco-Ray property (the "Property"), as such land is described in the deed recorded as Instrument #200509160104823 among the land records in the Clerk's Office of the Circuit Court of Loudoun County, Virginia (the "Land Records").

A portion of the Property currently is encumbered by an open space easement running to the benefit of the Board (the "Existing Easement"), which easement is recorded in Deed Book 2314, at page 1589 among the Land Records.

The Owner and the Board desire and intend to amend the Existing Easement for the purpose of clarifying and confirming certain uses that are expressly permitted on the portion of the Property encumbered by the Existing Easement.

AMENDMENT:

NOW, THEREFORE, in consideration of the premises and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

1. **Amendment of Existing Easement.** Numbered paragraphs 10 and 11 of the Existing Easement are expressly amended and restated in their entirety as follows:

10. The ~~property~~ **portion of the Property which is** subject to this easement (the "Open Space Property") shall not be further subdivided, **except in connection with and to the extent necessary for, the dedication of public street right-of-way for Gloucester Parkway and Pacific Boulevard along alignments consistent with the Countywide Transportation Plan.**

11. Notwithstanding any of the foregoing provisions, the Grantor expressly reserves to itself, its successors and assigns the right to:

A-262

- (a) Continue the agricultural, forestry and naturalistic uses of the Open Space Property.
- (b) Continue to hunt, fish or trap on the Open Space Property subject to relevant laws.
- (c) Improve, repair, restore, alter, remodel or replace the existing and the permitted structures with structures of similar size and purpose provided that the changes are compatible with the conservation purposes of the Open Space Property and all other provisions of this Easement.
- (d) Continue the use of the Open sSpace Property for all purposes not inconsistent with this Easement which use shall expressly include, but not be limited to (i) the location, construction, maintenance and repair of existing and future utility lines and appurtenant facilities constructed pursuant to all necessary County approvals and related utility easements and shall include, (ii) use of the Open Space Property for wetlands mitigation, wetlands restoration and creation, stream restoration, wetlands and stream mitigation banking, and riparian reforestation purposes; (iii) construction of Gloucester Parkway and Pacific Boulevard along alignments consistent with the Countywide Transportation Plan; (iii) location, construction, maintenance and use of trails.

Except as specifically and expressly modified by this Amendment, the terms and conditions of the Existing Easements shall remain in full force and effect.

2. **Covenants Run with the Land.** This Amendment and the Existing Easement establish obligations which constitute real covenants which shall run with the land and be binding on the Owner and its administrators, executors, assigns, heirs and any other successors in title or interest.

3. **Counterparts.** This Amendment may be executed in several counterparts, each of which shall be deemed to be an original copy and all of which together shall constitute one and the same instrument binding on all parties hereto, notwithstanding that all parties shall not have signed the same counterpart.

[SIGNATURES APPEAR ON THE FOLLOWING PAGES]

WITNESS the following signature and seal:

OWNER:

NA DULLES REAL ESTATE INVESTOR LLC, a
Delaware limited liability company

By: _____
Its: _____

STATE OF _____
COUNTY OF _____

The foregoing instrument was acknowledged before me in the above jurisdiction this
____ day of _____, 200__, by _____ as
_____ of NA Dulles Real Estate Investor LLC, a Delaware limited liability
company, on behalf of the company.

Notary Public

My Commission Expires: _____

[Signatures continue.]

WITNESS the following signature and seal:

BOARD:

BOARD OF SUPERVISORS OF LOUDOUN
COUNTY, VIRGINIA, a public body corporate and
politic

By: _____ (SEAL)

Name:

Title:

COMMONWEALTH OF VIRGINIA
COUNTY OF LOUDOUN, to wit:

The foregoing instrument was acknowledged before me in the above jurisdiction this
____ day of _____, 200__ by _____,
of the Board of Supervisors of Loudoun County, Virginia, a public body corporate and politic, on
behalf of the Board.

Notary Public

My commission expires: _____

EXHIBIT D
DESIGN GUIDELINES

January 4, 2010

EXHIBIT E

PD-MUB DISTRICT INCENTIVES

January 13, 2010

The PD-MUB District permits a maximum FAR of 0.5, but also includes various incentives that allow increases in the maximum permitted FAR up to 1.0. As depicted on the Concept Plan and committed to in the Proffers, this rezoning satisfies the requirements for most of the incentives. In accordance with Section 4-1359(C) of the Revised 1993 Zoning Ordinance, an increase in FAR for the Property above 0.5 is justified according to the following:

- 1) **The Board of Supervisors may grant an increase of 0.1 FAR above the maximum permitted floor area ratio if the district size is a minimum of 100 acres.**

The proposed PD-MUB District contains 336 acres, well in excess of the 100-acre minimum; therefore an increase in FAR of 0.1 is justified.

- 2) **The Board of Supervisors may grant an increase of 0.1 FAR above the maximum permitted floor area ratio if structured parking is provided to satisfy at least 50% of the required parking for the district. An increase of 0.2 FAR above the maximum permitted floor area ratio may be granted if 100% of the off-street parking is provided within structured parking. Such structured parking shall be designed in a manner that is integrated with nearby building architecture to minimize visual impact.**

Parking for Kincora will be phased with the development of the Property. At full build-out, at least 50% of the required parking necessary to support the uses will be provided through a combination of below and above grade parking structures. Above grade parking structures will be designed in a manner that is harmonious with the overall architectural scheme at Kincora. (See Proffer V.F.) Therefore, an increase in FAR of 0.1 is justified. This additional intensity will not be available to the Owner until a site plan is submitted confirming that 50% of the total required parking will be provided as structured parking.

- 3) **The Board of Supervisors may grant an increase of 0.1 FAR above the maximum permitted floor area ratio if at least 10% of the dwelling units provided are affordable to households earning up to 100% of the Washington Area Median Income (AMI), are located in vertically mixed buildings, and that covenants are**

recorded in favor of the County to maintain such affordability for a minimum period of 15 years.

The Owner is committed to providing 16.25% of the total number of dwelling units constructed within Kincora as affordable to persons earning up to 100% of the AMI. This will be accomplished through the provision of a combination of affordable dwelling units (available to persons earning up to 70% of the AMI) and other unmet housing needs programs (workforce dwelling units) (available to persons earning up to 100% of the AMI). Affordable dwelling units will be provided in accordance with the requirements of the Revised 1993 Loudoun County Zoning Ordinance. The balance of this commitment will be composed of workforce dwelling units. (See Proffers I.D. and I.E.). Therefore, an increase in FAR of 0.1 is justified. This additional intensity will not be available to the Owner until a site plan is submitted confirming that at least 10% of the total number of dwelling units will be made available to persons earning up to 100% of the AMI.

- 4) The Board of Supervisors may grant an increase of 0.1 FAR above the maximum permitted floor area ratio if at least one of the following uses is provided. In addition, the floor area of such use will be excluded from the FAR calculations:**
- (a) Hotel, full-service to include a sit-down restaurant, meeting space, and at least two of the following in house services: exercise room, room service, or concierge service.**
 - (b) Adult day care facility.**
 - (c) Theater, indoor, limited to live performances.**

Kincora proposes to include at least one full-service hotel, as well as an indoor theater for the performing arts. (See Proffers I.B.3. and I.G.). Therefore, an increase in FAR of 0.1 is justified, and the floor area for such uses will be excluded from the FAR calculations for the Property. This additional intensity will not be available to the Owner until a site plan is submitted proposing the construction of either a full-service hotel or the performing arts center.

- 5) The Board of Supervisors may grant an increase of 0.1 FAR above the maximum permitted floor area ratio if a local shuttle system or other public transportation improvement is provided by the applicant/landowner.**

The Owner proposes to provide a local shuttle service that will provide transportation services for employers within Kincora to destinations in the vicinity, including Dulles Town Center. (See Proffer III.L.). In addition, the Owner has proffered contributions for transit service and bus shelters to be provided along Pacific Boulevard, which will accommodate public bus service for the region once routes are established in the Route 28 corridor. (See Proffers III.I. and III.K.). Therefore, an increase in FAR of 0.1 is justified. This additional intensity will not be available to the Owner until a site plan is submitted with the requisite amount of development per these Proffers that requires the implementation of a shuttle service.

- 6) **The Board of Supervisors may grant an increase of 0.1 FAR above the maximum permitted floor area ratio when at least 2 contiguous lots that existed at the time of adoption of this Ordinance with each having frontage on an arterial road, submit a single zoning map amendment application to a PD-MUB district with the CDP showing no direct access onto an arterial road from any such lot.**

The Property has frontage along an arterial road (Route 28). The rezoning application proposes to remove all existing access points onto Route 28, and will provide access to Route 28 via the Route 28/Nokes Boulevard interchange that is currently being constructed on the Property. Therefore, an increase in FAR of 0.1 is justified.

Kincora satisfies all the incentives described above. Therefore, the maximum FAR potential for the PD-MUB District at Kincora should be established at 1.0. Notwithstanding the maximum 1.0 FAR potential of the Kincora PD-MUB District, the Proffers and Concept Plan limit the development allowed on the Property to a maximum FAR of 0.79 with the floodplain excluded (5,517,025 square feet). The Owner shall not be permitted to exceed such maximum density and intensity of use allowed in the Proffers and on the Concept Plan unless a future application for a Zoning Concept Plan Amendment ("ZCPA") to increase those proffered limitations is approved.

EXHIBIT F
BROAD RUN RESTORATION CONCEPT PLAN

June 2009
July 8, 2009
January 2010

EXHIBIT G
CENTRAL PLAZA AND DESIGN ILLUSTRATIONS

January 13, 2010

KINCORA
Loudoun County, Virginia



Loudoun County, Virginia

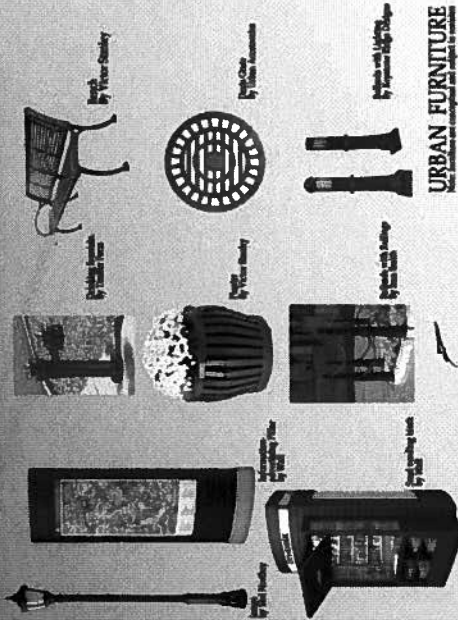


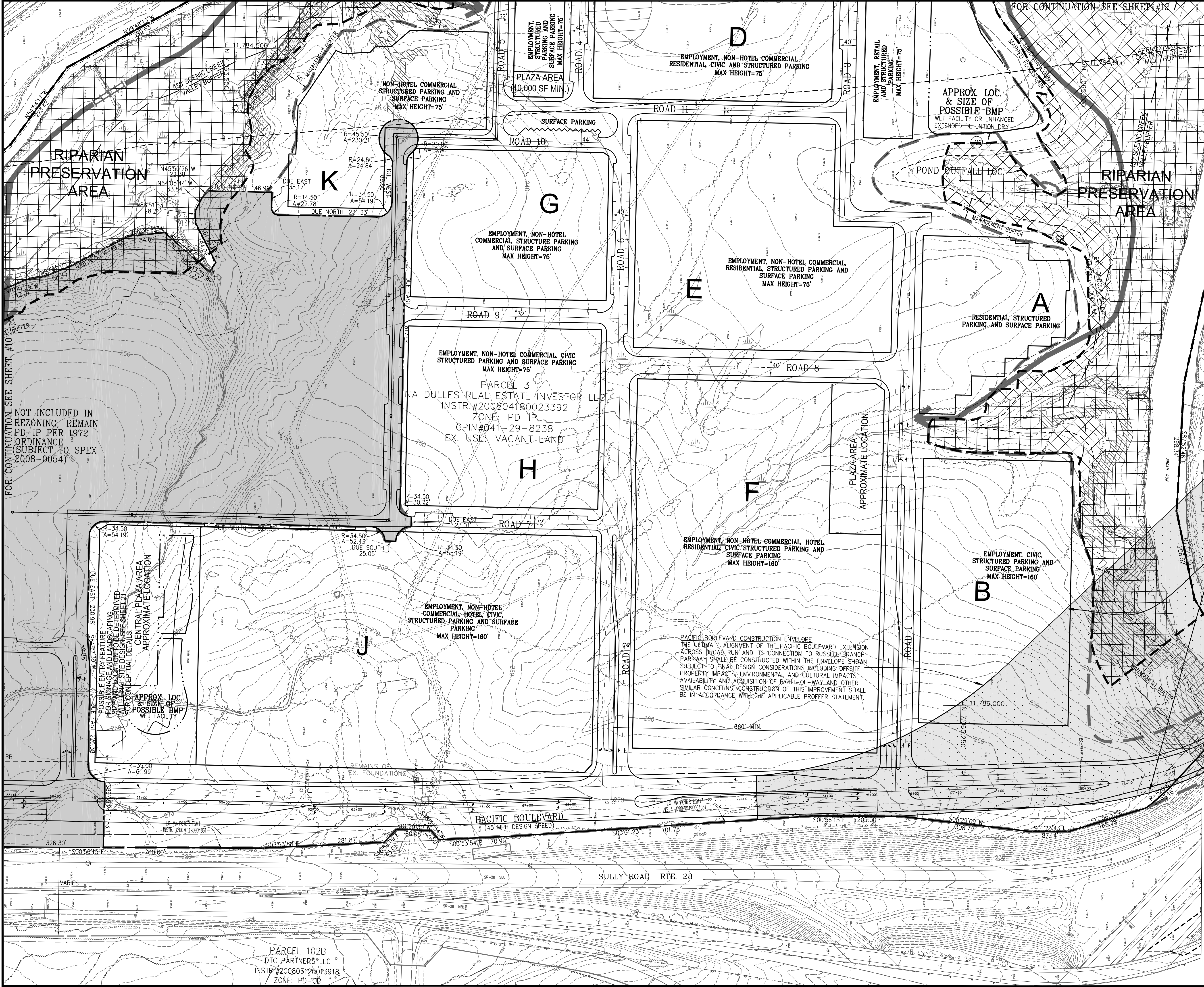
2. PARKS

3. 4 PARKS



The Crossroads of Commerce and Knowledge





LEGEND:

- LIMITS OF CLEARING
- MODERATE SLOPES (SLOPES 15% TO 25%)
- VERY STEEP SLOPES (SLOPES >25%)
- NOT INCLUDED IN REZONING; TO REMAIN PD-IP PER 1972 ORDINANCE
- RIPARIAN PRESERVATION AREA
- RIPARIAN REFORESTATION AREA
- WETLAND MITIGATION AREA
- WETLAND MITIGATION BANK AREA
- TRAIL HEAD LOCATIONS ARE CONCEPTUAL AND SUBJECT TO ADJUSTMENT AT FINAL ENGINEERING
- PACIFIC BOULEVARD CONSTRUCTION ENVELOPE

7700 Little River Turnpike Suite 503
Annandale, Virginia 22003
TEL 703.642.8080 FAX 703.941.8344
www.urban-llc.com

Seal

Client

NA Dulles Real Estate Investor, LLC
A Delaware Limited Liability Company
c/o Tritec Development Group, LLC
45 Research Way, Suite 100
East Setauket, NY 11733
703.797.2077 ext 101 or 102

Revision / Issue

No.	Description	Date
1	COUNTY COMMENTS 07-21-09	
2	COUNTY COMMENTS 10-02-09	
3	COUNTY COMMENTS 01-08-10	

Issue

Date	Description

Project Name

KINCORA
VILLAGE CENTER

Broad Run Election District
Loudoun County, Virginia

Drawn By TB	Checked By ESS
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Project No. 08-356

Date OCT., 2008

Drawing Title

CONCEPT
PLAN

Scale: 1"=100'

Drawing Number

11

Sheet 11 of 35 ZP-1675-2

Urban, Ltd. - M. Voss Kincora\zmap\1675-2-concept.dwg [CONCEPT] January 08, 2010 - 12:36pm burroughs

PROPOSED ZONING AREAS

TOTAL PROPERTY AREA= 17,287,887 SF. OR 396.87 AC.
(ACTUAL SURVEYED BOUNDARY AFTER VDOT RIGHT
OF WAY ACQUISITION WITH PROJECT 0028-053-1140)

NOT INCLUDED IN REZONING;
TO REMAIN PD-IP PER
1972 ORDINANCE
(SUBJECT TO SPEX 2008-0054)

AREA= 2,625,530 SF OR 60.27 AC.

PD-MUB TOTAL APPLICATION AREA= 14,662,357 SF. OR 336.60 AC.

- A. FLOODPLAIN AREAS:
1. LOUDOUN COUNTY MAPPED FLOODPLAIN AREA OF PD-MUB APPLICATION AREA = 7,875,345 SF. OR 180.79 AC.
 2. TOTAL REDUCTION IN FLOODPLAIN AREA RESULTING FROM FPST 2009-0004 = 868,504 SF. OR 19.94 AC.
 3. REDUCTION IN SITE FLOODPLAIN AREA RESULTING FROM FPST 2009-0004 = 588,786 SF. OR 13.52 AC.
 4. RESULTING ULTIMATE FLOODPLAIN AREA OF PD-MUB APPLICATION AREA = 7,286,559 SF. OR 167.27 AC.
 5. PORTION OF RESULTING ULTIMATE FLOODPLAIN AREA TO BE DEDICATED FOR PUBLIC PARK PURPOSES (7,061,511 SF OR 162.11 AC.)

- B. PUBLIC RIGHT-OF-WAY DEDICATION AREAS:
1. TOTAL DEDICATION AREA FOR PACIFIC BOULEVARD AND GLOUCESTER PARKWAY = 532,763 SF. OR 12.23 AC.
 2. DEDICATION AREA WITHIN ULTIMATE FLOODPLAIN AREA = 151,729 SF. OR 3.48 AC.
 3. DEDICATION AREA OUTSIDE OF ULTIMATE FLOODPLAIN AREA = 381,034 SF. OR 8.75 AC.

- C. OPEN SPACE AREAS (SEE SHEETS #34 & 35):
1. SITE AREA = 336.60 AC; MINIMUM OPEN SPACE REQUIRED IS 10% = 33.66 AC.
 2. MINIMUM OPEN SPACE PROVIDED = 34.90 AC. (EXCEEDS MINIMUM)

PD-MUB DEVELOPABLE AREA (INCLUDING FLOODPLAIN) = PD-MUB TOTAL AREA - B.1.
= 14,662,357 SF. - 532,763 SF.
= 14,129,594 SF. OR 324.37 AC.

PD-MUB DEVELOPABLE AREA (EXCLUDING FLOODPLAIN) = PD-MUB AREA - A.4. - B.3.
= 14,662,357 SF. - 7,286,559 SF. - 381,034 SF.
= 6,994,764 SF. OR 160.58 AC.

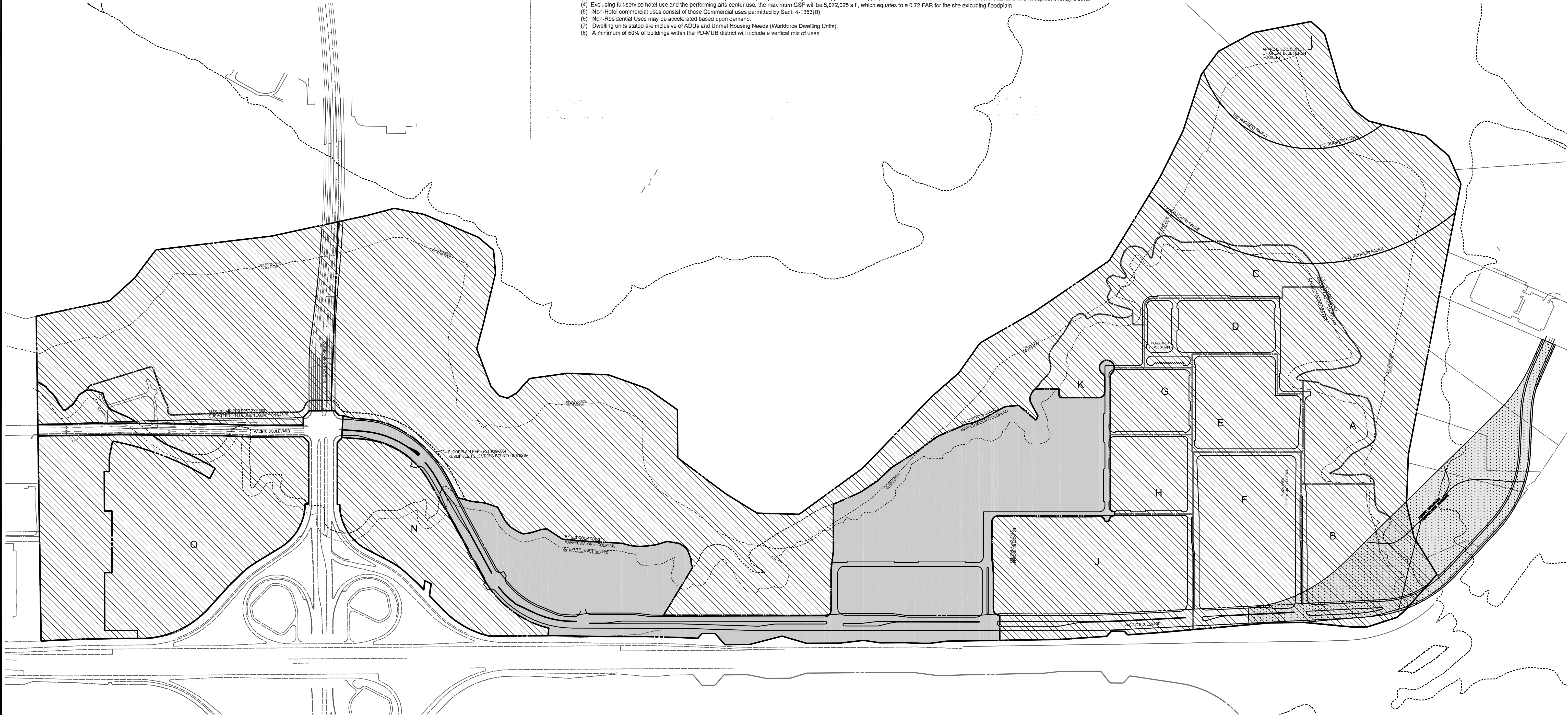
Kincora
MUB Land Bays and Development Phasing

Land Bays (1)	Size	Employment	Non-Hotel Commercial	Hotel (sq ft)	Hotel Units	Residential (sq ft)	Residential Units	Civic Uses (2)	Total Bldg Sq Ft
A	220,860					281,000	255		281,000
B	408,758							25,000	475,000
C	402,957	450,000				446,000	405		446,000
D	522,857	375,000	63,000			176,000	160	25,000	639,000
E	387,652	10,000	53,000			521,000	472		584,000
F	623,428	558,000	30,000	345,000	420	120,000	108	42,000	1,985,000
G	204,238	86,200	58,200						142,400
H	245,170	93,000	65,000					15,000	173,000
J	730,570	300,000	62,625	130,000	150			100,000	592,625
K	221,619		40,000						40,000
N (3)	616,601	100,000	5,000					20,000	125,000
Q	1,732,116	850,000	24,000					50,000	924,000
Totals	6,296,824	2,822,200	358,825	475,000	570	1,544,000	1,400	277,000	5,517,025

Developable Area (Including Floodplain) 14,129,594 Density (4) 0.39
Developable Area (Excluding Floodplain) 6,994,764 0.79

	Phase 1	Phase 2	Phase 3	Total	% of FAR	
Employment	425,000	500,200	1,897,000	2,822,200	51.15%	Exceeds 40% Minimum
Non-Hotel Commercial (5)	192,625	105,200	101,000	398,825	7.23%	Exceeds 5% Minimum
Hotel	130,000	-	345,000	475,000	8.61%	Exceeds 5% Minimum
Civic (2)	20,000	100,000	157,000	277,000	5.02%	Exceeds 5% Minimum
Total - Non Residential (5)	767,625	705,400	2,500,000	3,973,025	72.01%	
Multifamily Residential (sq ft)	772,000	388,000	388,000	1,544,000	27.99%	Exceeds 10% Minimum
Multifamily Units (7)	700	350	350	1,400	8.72 Units Per Acre	Exceeds 10% Land Area Minimum
Parks & Open Space				163 acres		
Total Square Footage	1,539,625	1,091,400	2,886,000	5,517,025	100.00%	

- (1) The development amounts stated in each land bay are subject to change with final engineering and site design.
(2) Civic Uses stated as minimum amounts to be provided in each land bay. Ultimate amount of Civic Spaces for the entire property to be provided in conformance with that required by the proffer statement.
(3) Non-Hotel and Hotel Commercial uses within Land Bay N shall only be permitted subject to the approval of an appropriate determination that such area is located outside of the floodplain overlay district.
(4) Excluding full-service hotel use and the performing arts center use, the maximum GSF will be 5,072,025 s.f., which equates to a 0.72 FAR for the site excluding floodplain.
(5) Non-Hotel commercial uses consist of those Commercial uses permitted by Sect. 4-1353(B).
(6) Non-Residential Uses may be accelerated based upon demand.
(7) Dwelling units stated are inclusive of ADUs and Unmet Housing Needs (Workforce Dwelling Units).
(8) A minimum of 50% of buildings within the PD-MUB district will include a vertical mix of uses.

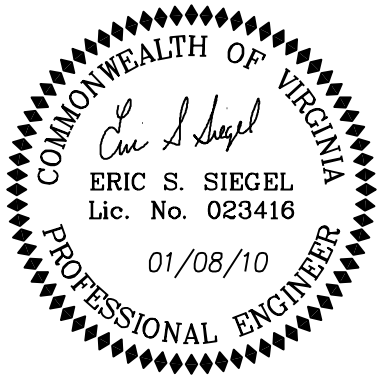


MAP
SCALE: 1"=300'



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Seal



Client

NA Dulles Real Estate
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A Delaware Limited Liability Company
c/o Trilec Development Group, LLC
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East Setauket, NY 11733
703.797.2077 ext 101 or 102

Revision / Issue

No.	Description	Date
1	COUNTY COMMENTS 07-21-09	
2	COUNTY COMMENTS 10-02-09	
3	COUNTY COMMENTS 01-08-10	

Issue

Date	Description
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Project Name



KINCORA
VILLAGE CENTER

Broad Run Election District
Loudoun County, Virginia

Drawn By TB
Checked By ESS

Project No. 08-356

Date OCT., 2008

Drawing Title

CONCEPT
PLAN
TABULATION
SHEET

Scale: 1"=300'

Drawing Number

13

Sheet 13 of 35 ZP-1675-2